GOVERNMENT OF INDIA
MINISTRY OF PRODUCTION

# THE REPORT

OF

# THE AMBAR-CHARKHA ENQUIRY COMMITTEE

1956

We beg to submit our report upon the Ambar charkha.

2. Our report covers the technical and economic aspects of the problem, in accordance with the terms of reference.

3. Appreciating the desire of Government, and the need to enable Government to take decisions upon the pressing aspects of the over-all textile position, and upon the programmes including the mill, handloom, and charkha programmes for the current year, we have already submitted to Government our conclusions and recommendations on May 25. We understand that our recommendations have in the main been found acceptable to Government.

4. In the short time at our disposal, and in view particularly of the incompleteness of the tests and experiments connected with the Ambar charkha, we have necessarily had to depend upon somewhat inadequate data. While there is reasonably adequate data available upon several of the matters referred to our Committee, on some matters on the other hand the data is very inadequate. We have emphasised the need for continuing the experiments, on an increasing scale, and of watching closely and assessing the results obtained. Despite these limitations, we believe that the recommendations we have made will be found both realistic and practical, as well as in keeping with the need of the country to move towards a decentralised economy and local self-sufficiency within reasonable limits, to provide increasing and increasingly gainful employment, and to attain a socialist economy.

5. We feel it our duty to draw special attention towards the organisational aspects of the problem. Some of the organisational aspects have been mentioned in our recommendations. We consider these recommendations necessary to ensure a reasonable prospect of success for the Ambar charkha programme.

6. Although we were constituted by Government in separate groups to consider the technical and economic aspects respectively, the two parts of the Committee have, with the consent of all the members, worked as one. The technical and economic aspects of the problem are too closely inter-related for each to be dealt with in isolation.

7. We may point that during the very early stages of its deliberations, the Committee came to the unanimous decision that the differing views of the members of the Committee on each one of the different terms of reference should be recorded without mentioning

the names of members who hold such views. Consequently in the body of the report itself views expressed by the minority group in the Committee have been specifically mentioned. All the members of the Committee have signed the report since it contains the views expressed both by the majority as well as the minority. One member, Shri N. Mazumdar who was not present at the meeting when the report was finalised has not signed.

8. Our recommendations are unanimous.

(S. V. AIYER)
(H. B. BHAR)
(KRISHANDAS GANDHI)
(GYANCHAND)
(A. S. E. IYER)
(PURUSHOTTAM KANJI)
(S. S. KHERA)
(C. J. SONEJI)
(MORARJI VAIDYA)
(S. R. VASAVADA)

NEW DELHI;
*23rd June*, 1956.

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# INTRODUCTORY

## Genesis

In pursuance of the conclusions and suggestions of the Standing Committee of the National Development Council, the Planning Commission constituted, on the 28th June, 1955, a Committee called the Village and Small-Scale Industries (Second Five-Year Plan) Committee, under the chairmanship of Prof. D. G. Karve. This Committee was asked to prepare an industry-wise scheme for the utilisation of the resources to be earmarked for the development of village and small industries in the Second Plan. This scheme was to be in keeping with the provision made in the draft plan frame and in the light of the recommendations made by the panel of economists. The basic approach of the plan frame and of the panel of economists envisaged a pattern of economy composed chiefly of small decentralised units of economic activity. Any increase in the scale required in any field was to be brought about chiefly through the organisation of co-operatives. Centralisation and large-scale operation was to be adopted only to the extent necessary to derive appropriate advantage from modern technology. This decentralised pattern of economy was recommended as appropriate to the development of village and small scale industries and as fitting in with the idea of a socialist pattern of society.

2. In conformity with this basic approach to the question of village and small-scale industries, the Karve Committee in its report published in October, 1955, strongly recommended that production of yarn required for the additional production of cloth during the Second Plan period estimated at 1400 to 1700 million yards of cloth should be organised on a decentralised basis to the greatest extent possible. A corollary to this recommendation was that production by mills and power looms should be limited to the level already reached *i.e.*, 5,000 million yards and 200 million yards respectively and all additional cloth requirement during the period of the Plan should be met by the expansion of handloom production.

3. At the time when the Karve Committee was carrying out its investigations, cotton spinning on a decentralised basis was done mostly by the ordinary spinning wheel, commonly known as the traditional charkha. The Karve Committee realised that if the entire yarn supplies to meet the additional requirements of cloth in the period of the Second Plan were to be organised on a decentralised basis, a much higher level of technique would have to be introduced in the cotton spinning equipment. Although, during the course of recording evidence, the Karve Committee was informed of the work that had already been initiated for improving a small-scale spinning unit equipment like the Ambar charkha and the other units associated with the names of Shri Gupte and Shri Kale, it felt that the information then available regarding the mechanical soundness and performance of these units and the quality and general acceptability of the yarn obtained from them was too meagre to enable it to express any

definite opinion about the feasibility of meeting the yarn requirements for additional cloth production from small spinning units, operating on a decentralised basis. About the middle of 1955 the All India Khadi and Village Industries Board had prepared a comprehensive programme for the production of the entire additional quantity of yarn required during the Second Plan through the Ambar charkha. A summary is contained in Appendix I. The Karve Committee was, however, of the opinion that technical and organisational experiments connected with the Ambar charkha should continue to be pursued with vigour and the position reviewed in April or May, 1956, when the results of the experiments which were in the process of being conducted would be finally known.

4. Soon after the All-India Khadi and Village Industries Board had first chalked out its draft Ambar charkha programme, Government requested the Ahmedabad Textile Industries Research Association, Ahmedabad and the Technological Laboratory of the Central Cotton Committee at Matunga, two leading textile technological laboratories in India, to conduct experiments in order to assess:—

(i) the technical efficiency of the Ambar charkha including its mechanical soundness, ease in operation and repair and capacity to produce sufficient quantities of yarn; and

(ii) the quality of the yarn produced and its acceptability to the handloom weaver who has hitherto been accustomed to weave with mill-spun reeled yarn.

Copies of some letters written to the laboratories on this subject are in Appendix XII. In addition to these laboratory tests, Government also sanctioned in November, 1955, a series of field tests, under a pilot project to be implemented by the All-India Khadi and Village Industries Board through the Sarva Seva Sangh. The terms of reference were the same as those of the laboratory tests. Both the laboratories and the All-India Khadi and Village Industries Board were required to submit their findings to Government by the end of April, 1956.

## Appointment & Terms of reference of the Ambar Charkha Enquiry Committee

5. With a view to collate the data from the technological laboratories and from the pilot scheme of the Khadi and Village Industries Board and with a view to adequately appraise the findings of the research and experiments conducted, the Government of India, early in March, 1956, decided to set up a special committee of enquiry. Government considered that in order to enable it to assess the merits of the Ambar charkha programme which was referred to in the report of the Karve Committee, it is necessary to make an assessment by carrying out experiments and enquiries.

In pursuance of this, Government by their Resolution No. 12-Cot. Ind. (1) (3)/55, dated the 5th March, 1956, constituted a Committee with the following members:—

*Chairman*

(1) Production Secretary.

*Members*

(2) Shri Krishandas Gandhi, Sarva Seva Sangh, Wardha.
(3) Shri A. S. E. Iyer, Secretary, All India Handloom Board, Bombay.
(*4) Shri Purushottam Kanji, Chairman, Bombay State Finance Corporation & Chairman Bombay State Wage Board.
(5) Shri N. Mazumdar, Industrial Adviser, Textile Production, Office of the Textile Commissioner, Bombay.
(6) Shri C. J. Soneji, Textile Technologist and Industrial Chemist, Bombay.
(7) Shri S. R. Vasavada, General Secretary, Textile Labour Association, Ahmedabad.

Mrs. P. Johari, Deputy Secretary, Ministry of Production, was appointed as Secretary to the Committee.

The Committee was required to report, *inter-alia,* on the following points:—

(a) whether the different tools or machines comprising the Ambar charkha set are capable of being worked with hand;

(b) whether a normal adult can work them for 8 hours, with reasonable intervals of rest, say 15 minutes after every 2 hours and a recess of one or two hours after 4 hours, without any particular feeling of fatigue;

(c) whether the charkha can give a production of about 8 hanks of yarn, starting from the carding of cotton; or a production of about 16 hanks if the rovings are separately prepared and supplied for 8 hours' effective work, by a person who has received training for 6 weeks and has regularly practised on the charkha for a further period of 6 weeks;

(d) whether the tools or machines are capable of producing yarn of coarse, medium and fine counts with necessary adjustments, the range being 6 to 18, 18 to 32 and 32 to 48;

(e) whether the yarn is fairly even for the purpose of weaving on handlooms *i.e.,* it does not result in too many breakages while passing through the reeds, because of variations in the counts;

(f) whether the yarn is fairly strong for the purpose of weaving on handlooms, *i.e.* it does not give any particular difficulty in sizing and weaving; whether it is capable of being woven more or less as easily as the average reeled yarn available to handloom weavers and with more or less as much speed;

(g) the availability of different varieties of cotton for producing different counts of yarn and to indicate which varieties of cotton are suitable for spinning different counts with the Ambar charkha set;

(h) what counts of cloth of specified reeds and picks could be woven on the handloom from Ambar charkha yarn and which from mill yarn;

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* Appointed *vice* Shri P. N. Bhutta, General Manager, Empress Mills, Nagpur, who expressed his inability to work on the Committee due to his pre-occupations.

(i) the percentage of waste at different stages in spinning and weaving compared with similar wastage in producing mill yarn of indentical counts from the same variety of cotton.

6. Subsequent to the issue of the notification under reference, Government, after further consideration, came to the conclusion that the economic aspects of the Ambar charkha programme were so closely linked with the technological aspects that a full and comprehensive enquiry must necessarily take into account both facets of the problem. In fact, this Committee, at its very first meeting had made a recommendation to this effect to Government. Accordingly, Government by their Resolution No. 12(3)/56-Cot. Ind. I, dated the 2nd of May, 1956, appointed a sub-committee of the Ambar Charkha Enquiry Committee to investigate the economic aspects of the programme.

This sub-committee was composed of the following:—

*Chairman*

(1) Production Secretary.

*Members*

(2) Shri S. V. Aiyar, Chief Cost Accounts Officer to the Government of India, Ministry of Finance.

(3) Shri H. B. Bhar, Deputy Secretary, Ministry of Finance (P.E.N. Division).

(4) Dr. Gian Chand, New Delhi.

(5) Shri Morarji Vaidya, President, Indian Merchants' Chamber and President, Indian Manufacturers' Association.

The terms of reference of the sub-committee were to investigate the economic implications of supplying yarn manufactured by the Ambar charkha for the handloom industry, indicating:—

(a) cost of production of yarn;

(b) subsidy required for the production and distribution of yarn;

(c) subsidy required for the production and distribution of the Ambar charkha;

(d) the difference in the cost of supplying yarn to the handloom weavers as between yarn manufactured by the Ambar charkha and the yarn reeled by mills; and

(e) the income of the individual spinner operating the Ambar charkha.

**Assumptions**

7. Before describing the procedure adopted for conducting the investigations involved, it is necessary to set down the basic assumptions on which the Committee has acted. These are:—

(i) Government's policy towards a decentralised economy; a decentralised production as far as possible; and specifically a decentralised textile industry, from cotton to cloth, including marketing; and an effort to meet as much as possible of the total additional cloth requirements in the period of the Second Plan through decentralised spinning and weaving;

(ii) the need to provide more employment; and

(iii) progress towards a socialist State.

8. A decentralised economy and an insurance against enforced idleness are among the important requirements of a socialist State. Decentralisation, apart from creating the most propitious atmosphere for diminishing economic and social inequalities, has a special significance in the background of the very large volume of unemployment obtaining in India today. In fact, in a society where there is excess of man-power on the one hand and on the other, a dearth of opportunities for utilising this man-power, expansion of employment becomes an end in itself; or at least, an end and an objective to which a high priority must inevitably be accorded. Decentralisation in the economic field, diffusion of industry and the adoption of labour intensive modes of production are some of the ways of expanding employment opportunities. The large incidence of unemployment and under-employment has inevitably lowered the per capita national income and depressed the standard of living. Decentralisation by harnessing a resource which is the most abundant in this country, namely, man-power, presents a remedy to the greatest drawback in the evolution of a socialist State.

In order not to lose altogether the advantages of large-scale mechanised production and in consideration of the need to reduce the country's dependence on import of capital goods, the decentralised method of production must apply mainly to consumer goods. In the case of heavy basic industries, in fact, there should be no question of suggesting that considerations of economic and technological efficiency be set aside in deference to the emphasis on employment.

Decentralisation, combined with as great a degree as possible of village self-sufficiency, specially in the matter of essential commodities like food and cloth, help to protect the economy against external economic pressure and the stresses of war. This aspect is also important.

The Committee has set down its recommendations for the consideration of Government in the belief that decentralisation and an accent on the creation and expansion of employment opportunities take the country further towards the goal of a socialist State.

**Procedure of Enquiry**

9. The first meeting of the Committee was held in Delhi on the 13th of March, 1956. A questionnaire on the technological aspects of the Ambar charkha and yarn produced thereon was finalised and issued to the Ahmedabad Textile Industries Research Association, the Laboratory of the Central Cotton Committee, Matunga and to the All India Khadi and Village Industries Board. It was also decided to extend the laboratory tests to 4 other institutes concerned with textile technology. These were the Krishna Rajendra Silver Jubliee Technological Institute, Bangalore, the Bengal Textile Institute, Serampore, the Kala Bhavan, Baroda and the Textile Institute, Kanpur. The questionnaire for assessing the technical potentialities of the Ambar Charkha was, therefore, issued to those four institutes

also. The All India Khadi and Village Industries Board was requested to supply the improved model of the Ambar Charkha and trained personnel to each of the new institutes, as also to the technological laboratory at Matunga for conducting experiments. The design of the experiments was to be framed after joint consultation between the Directors of Institutes, the All India Khadi and Village Industries Board, the Ambar Samiti, Wardha and a representative of the Textile Commissioner. The Committee visited the Ahmedabad Textile Industries Research Association and the Technological Laboratory of the Central Cotton Committee, Matunga and studied for itself the tests and experiments conducted there. It also held discussions with the Directors of the two laboratories. It also interviewed the Chairman and other representatives of the All India Khadi and Village Industries Board as regards the data then available in respect of the field tests.

10. The Committee also inspected, on the spot, the work done in selected *Parishramalyas* (training *cum* production centres) run under the pilot project of the All India Khadi & Village Industries Board. Despite the limitations of time, the Committee was able to visit nine of these training *cum* production centres:—

One in Gujerat,
One in P.E.P.S.U.,
Two in Punjab,
One in Andhra, and
Four in Madras.

The Committee was also able to inspect two of the 15 *Vidyalyas* opened by the Board under their pilot scheme. During its visits to the *Parishramalyas*, the Committee collected a few samples of yarn, as also some samples of cloth, wherever available and sent them for independent testing to the Textile Institutes. Some yarn in bulk produced at the *Parishramalyas* was also acquired by the Committee for the purpose of having its weavability tested by handloom weavers who had hitherto been accustomed to mill yarn only. Apart from sending an officer of the Committee's Secretariat to collect and tabulata data received from the Board's *Parishramalyas*, the Committee also conducted an independent study of the working of one selected *Parishramalya* for a period of 5 days, during the course of which relevant data was collected by a textile expert, specifically deputed for the purpose.

11. Soon after the expansion of its terms of reference, to include the economic aspects of the Ambar Charkha programme and the appointment of the Economic Sub-Committee, a second questionnaire dealing with costs and financial implications was issued to the Directors of the 6 textile laboratories, the All-India Khadi & Village Industries Board, the Directors of Industries in all States, the Schools of Economics in Bombay and Delhi and a few economists of repute.

12. Although the Economic Sub-Committee was set up by Government as a separate entity, having a separate set of terms of reference, the two sections namely the technological and economic, considered all the terms of reference as one Committee, in view of the fact that

the technological and economic aspects of the Ambar charkha programme are inextricably inter-linked.

13. During its tour, the Committee also availed of opportunities to see demonstrations of other small units invented for spinning yarn on a decentralised basis. These were Shri Sathe's pedal charkha and the four-spindle charkha, manufactured by Messrs Sunder Dass Saw Mills, Bombay. Such of the members of the Committee as were available in Delhi also observed a demonstration of the domestic spinning unit prepared by the Textool Co. Ltd., Coimbatore. The only charkha other than the Ambar charkha which the Committee considered worth examining further was the one produced by the Sunderdas Saw Mills, Bombay. This particular charkha of which only one or two prototype exist so far has been under examination at A.T.I.R.A. A report received from A.T.I.R.A. on this Charkha is at Appendix XII. On the basis of the examination made so far the Ambar Charkha appears to be the better of the two.

During the course of its inquiry, some members of the public sent to the Committee their views and criticisms of the Ambar Charkha. These have been taken into consideration.

14. In addition to its first meeting on the 13th of March, the Committee met in Ahmedabad, Bombay, Rajpura, Adampur, Tirupur and Puttur. Its pen-ultimate session was held in Delhi on 21st, 22nd and 23rd May, 1956, when it considered seriatim, all terms of reference, both technological and economic and after duly weighing the data available, reached certain conclusions and made recommendations. The Committee authorised the Chairman to submit forthwith to Government, a summary of conclusions and recommendations adopted by it, to enable Government to proceed with its consideration, without further loss of time, of so important a matter like the decentralisation of the textile industry for meeting the additional requirements of cloth during the period of the Second Plan. The Committee's conclusions and recommendations were accordingly presented to Government on the 25th of May, 1956.

The Committee finally met on the 23rd of June, 1956, to consider and finalise the report.

# I. CONCLUSIONS AND RECOMMENDATIONS

## *Conclusions on Terms of Reference and other points considered by the Committee.*

1. *Whether the different tools or machines comprising the Ambar Charkha set are capable of being worked with hand?*

It is unanimously agreed that the answer is in the affirmative.

2. *Whether a normal adult can work the different tools or machines comprising the Ambar charkha set for 8 hours with reasonable intervals of rest—say for 15 minutes after every two hours and a recess of one or two hours after four hours, without any particular feeling of fatigue?*

The majority view (six members) is a categorical "yes" with the comment that the conditions in which the Ambar charkha will be worked, specially in village homes, are entirely different from the regular and comparatively regimented work periods in mills.

Of the minority, one member answers with a categorical "no" on the data available; while two consider that the fatigue element should be tested comparatively, with ordinary industrial working conditions, and that for this there is not enough data on which to judge.

(para 17).

3. *What is the daily quantity of yarn that can be produced?*

4. *Whether the charkha can give a production of about 8 hanks of yarn, starting from the carding of cotton; or a production of about 16 hanks, if the rovings are separately prepared and supplied, for 8 hours effective work, by a person who has received training for 6 weeks and has regularly practised on the charkha for further period of 6 weeks?*

The majority (six) view is that the Ambar charkha can give a production of 6 hanks on the average, from cotton to reeling; one considers, it would be 6 to 8; while the others consider that the figure of 6 could probably be somewhat improved upon by more practice and further experimenting.

Of the minority (three), one member considers that the figure, on experience and data, so far obtained, should be between 5 and 6 hanks but that there may be great possibilities and room for improvement; one considers it should be 5; and the third that it should be between 4 and 5 but that the experience and data is inadequate. One member has no opinion to express. The Committee is unanimous that productivity for spinning and reeling only would be about double that from cotton to reeling.

(paras 22 & 23).

5. *Whether the tools or machines are capable of producing yarn of coarse, medium and fine counts with necessary adjustments, the range being* 6 *to* 18, 18 *to* 32 *and* 32 *to* 48?

It is unanimously agreed that the Ambar charkha is well suited to producing up to 24 counts and is capable of producing up to 18 counts and somewhat higher counts. (para 25).

6. *Whether the yarn is fairly even for the purpose of weaving on handlooms* i.e. *it does not result in too many breakages while passing through the reeds because of variations in the counts?*

7. *Whether the yarn is fairly strong for the purpose of weaving on handlooms, that is, it does not give any particular difficulty in sizing and weaving; whether it is capable of being woven more or less as easily as the average reeled yarn, available to handloom weavers and with more or less as much speed.*

The majority (six) consider that the data assembled and experience gained indicate that Ambar yarn is fairly even and fairly strong for the purpose of weaving on handlooms; four of them consider that the data already available is reasonably adequate, while the other two add the rider that further experimenting should be carried on, to confirm the position. Of the minority (three), one feels that the data and experience so far are inconclusive; while two consider that on the data available, Ambar yarn is neither even enough nor of the right strength for use on handlooms. One member abstained from expressing any opinion. (para 40).

8. *What would be the production of a fly shuttle handloom using Ambar yarn, in an* 8 *hour day, when compared to production of cloth of comparable quality and specifications on a fly shuttle handloom using mill yarn.*

There is general agreement amongst the Committee that as compared with mill yarn, the productivity of Ambar yarn in weaving is less and may vary from 5 per cent to 25 per cent less than in the case of mill yarn. One member has assessed the production of Ambar yarn at an average of 12 yards per day on a fly shuttle loom, but is unable to compare it with mill yarn. Another member feels that there is not enough data at all to come to any conclusion on the point. Another member considers that Ambar yarn so far used in weaving is limited by being produced by spinners with inadequate experience and perhaps inadequate training. The use of Ambar yarn on handlooms as compared to mill yarn has not been sufficiently tried out or established. This underlines the fact that the stage is too early and that a great deal more of experimentation and experience are necessary, before the Committee can really come to any conclusion at all. (para 38).

9. *The availability of different varieties of cotton for producing different counts of yarn and to indicate which varieties of cotton are suitable for spinning different counts with Ambar charkha set.*

The Committee is unanimously of the view that all the commonly named varieties of cotton of staple lengths 3/4″ to 7/8″ are well suited for the Ambar Charkha. (para 43).

Subject to the import-export programme, the kinds of cotton cultivated and encouraged for growing and the achievement of the Second Plan targets for cotton growing, as a whole, enough cotton will probably be available for all the decentralised spinning that can be organised. (para 42).

10. *What kinds of cloth of specified reeds and picks could be woven on the handloom from Ambar charkha yarn and which from mill yarn?*

The majority (six) consider that by and large, the same kinds of cloth of equivalent reeds and picks and within the yarn counts, already considered as suitable, can be woven from Ambar yarn as from mill yarn; but two of them consider it necessary to make a reservation as to the quality of the cloth as compared to that woven from mill yarn; of the two others who have expressed an opinion, both consider that whereas cloth of a sort can be woven from Ambar yarn on handlooms, no conclusions can be drawn as to quality while one of the two feels that heavy reed/pick cloth which can be woven from mill yarn cannot, in any case, be woven from Ambar yarn. (para 41).

11. *The percentage of waste at different stages in spinning and weaving, compared with similar waste in producing mill yarn of indentical counts from the same variety of cotton.*

The Committee is generally agreed that for equivalent counts using equivalent cotton broadly, whereas mill waste averages 17½ per cent, similar waste from the Ambar Charkha ranges between 12½ per cent to 15 per cent on the average. Of the 17½ per cent mill waste, about one third is trash and the remainder, that is between 11 per cent and 12 per cent. in all, is marketed as waste. In the case of the Ambar wastage, there is no adequate data to indicate as to what portion of the waste can either be re-used in the spinning process itself or otherwise. One member considers that of the mill waste, 50 per cent *i.e.* one half and not one third is trash. One member disagrees with the estimate of 12½ per cent to 15 per cent in the case of Ambar yarn and considers that the percentage of waste is, on an average 15. (para 50).

In the absence of any significant data, the Committee is unable to draw any conclusions, about the percentage of waste either in the case of Ambar yarn or in the case of mill yarn used in weaving. (para 47).

12. *The cost of production of yarn.*

The Committee has considered the question as to whether the cost of training should be reflected in the built-up cost of Ambar yarn and has come to the conclusion that cost of training should not be so included. The Committee agrees that the depreciation and maintenance element on the cost of the charkha unit itself is so small, per unit of production, that it is not worth including it in the cost of yarn. The cost of production of yarn is Rs. 2-14 per lb. for 18's. including handling charges with equivalent adjustments for other counts, depending on the cotton used.

(para 63).

## 13. *Subsidy required for the production and distribution of yarn.*

Towards the general intention of equalising market price of Ambar cloth, the Committee has considered the possibility of providing such equalisation by imposing a cess on mill yarn and possibily also on mill cloth and has come to the conclusion that a cess must be ruled out. The Committee is unanimously of the view that there should be a one-point subsidy and that it should be paid in respect of 25 per cent of the cloth produced for self-sufficiency, at production point and in respect of 75 per cent of the cloth produced for sale, at retail sale point. Four members are of the view that a subsidy of four annas in the rupee, for the present, at cloth point should be adequate to enable the Ambar cloth to be marketed to the extent of 75 per cent of the cloth produced. Three members are of the view that a slightly higher subsidy, approximately 5 annas in the rupee, may become necessary to enable the marketing of 75 per cent of Ambar cloth produced. Four members are of the view that a subsidy of at least 6 annas in the rupee will be necessary for the purpose and three of them are further of the view that even so, it is doubtful, whether all of the cloth produced can be marketed. The Committee considers that very careful administrative and organizational arrangements will be necessary, in order to implement the subsidy scheme.

(paras 65, 66, 67, 68 and 69).

## 14. *What are the working capital requirements for the production of Ambar cloth?*

Working capital required from cotton to cloth in the case of Ambar scheme and including the working capital required for the handloom involved, is estimated at approximately Rs. 500 per Ambar charkha set, employing two persons and combined with a handloom; but excluding the working capital required for stocking cotton seasonally; and including the working capital erquired for marketing the cloth. This sum of Rs. 500 per charkha set is equal to roughly 60 per cent of the annual production of Ambar cloth. (para 72).

## 15. *Subsidy required for the production and distribution of the Ambar charkhas.*

The Committee is unanimously agreed that some subsidy is necessary for the Ambar charkhas. In the first instance, the Ambar charkha set should be charged at full cost to the spinner to whom it is supplied, the cost being payable in easy instalments over five years, free of interest. It should be open to the appropriate agency authorised by Government when approximately half the cost has been recovered, to decide in the case of particular persons or class of persons, as to whether any part of the remaining half of the cost should be treated as subsidy. One of the main criteria in deciding upon the subsidy should be the use made of the charkha. In order to be eligible for the subsidy, the user of the Ambar charkha must be able to show objectively that the Ambar charkha has been gainfully used to approximately 75 per cent of the rated capacity.

(para 58).

16. *What is the working capital required for the manufacture of Ambar charkhas?*

Working capital required for the manufacture and supply of Ambar charkhas is estimated at the rate of approximately 50 per cent of the cost of charkha sets to be made and supplied in any one year, that is, an amount equal to six months' production.
(para 59).

17. *The difference in the cost of supplying yarn to handloom weavers as between the yarn manufactured by the Ambar charkha and yarn reeled by the mills.*

The handloom weaver in the co-operative society gets his yarn of 18's delivered to him at Rs. 1/9/6 plus 6¼ per cent as middle charges; whereas the weaver who is not in the co-operative society gets the yarn at Rs. 1/9/6 plus anything from 6¼ per cent to 12½ per cent from the market on 18's with suitable variations for other counts. The production cost of a lb. of Ambar yarn of 18's is Rs. 2-14-0.
(para 64).

18. *The income of the individual spinner operating the Ambar charkha.*

A flat piece-rate of 1½ annas a hank for all counts, for the present, would be reasonable, based on spinning counts for 16's to 32's. It is possible that this may encourage spinners to prefer lower counts below 16's down to 12's; therefore, it will be necessary to watch the situation closely and to revise the rate for the lower counts, if such a trend is found. Similarly, the situation will have to be watched, if there is a trend, towards the higher counts. In any case, it will be necessary to watch closely the working of the piece-rate as a whole and review it further after a period of 12 to 18 months.

(para 62).

19. While the Ambar charkha marks the culmination of a search for and effort towards designing a suitable unit, at the same time it is only at the beginning of its evolution as a model. (para 13).

20. There is much room for further improvement in the Ambar charkha, to increase the quantity and improve the quality of yarn produced. (para 13).

21. The Ambar charkha undoubtedly seems to have immense possibilities, in enabling the decentralisation of an industry producing a commodity essential next only to food; and in providing greater

gainful employment particularly in villages. There is justification for a balanced optimism, but also need for cautious advance and most careful organisation both in the field and at headquarters. (para 13).

22. There is also need to continue and carry out further field experiments on an intensive and extensive scale, in arriving at ultimate conclusions. (para 13).

23. Training in the use, handling and maintenance of the Ambar charkha set, combined with practice, is essential for a minimum of three months, for attaining adequate competence for production. Thereafter, steady practice significantly improves quality and productivity. (para 89).

24. The Committee has not looked for any other kinds of handspinning units but a few types shown by the inventors have been seen. Of those seen, the Ambar charkha seems the best. (para 13—Introductory).

## RECOMMENDATIONS

1. The experimental steps of the scheme should continue for some time longer; experiments should be on an increasing scale, in keeping with our other recommendations. (para 13).

2. Both intensive and extensive efforts should be made for improvements in the design of the Ambar charkha, both in the spinning unit and in the *Belni.* A design competition for the spinning unit, to conform *inter alia* with Gandhiji's specifications should be organised by Government. (para 13).

3. Much more experiment and testing should be done on productivity of yarn on the Ambar charkha, to see if it can be more than 6 hanks a day, after 3 months of training and practice. (para 13).

4. Charkhas should be adequately tested for quality and performance, before being used for production. (para 14).

5. Government should immediately set up a Textile Research Centre adequately equipped and staffed, mainly devoted to decentralised spinning and weaving; with regional centres to be set-up in due course. (para 24).

6. There should be an annual review of the progress and further prospect of the scheme, with special attention to technical improvements, quality of the product, productivity, worker's earnings, subsidy element and the extent of its further needs, prices, organisation and disposal of yarn. (para 24).

7. Generally speaking, yarn produced with the Ambar charkha should be upto 24 counts, since this charkha is best suited for the manufacture of yarn up-to this count. (para 25).

8. Growing of cotton staples suitable for the Ambar charkha, ¾″ to 7/8″, should be encouraged in all villages as part of a drive for self-sufficiency in the C.P.A. and agricultural programmes. (para 44).

9. Experiments should be conducted to reduce wastage in spinning to the minimum and possibilities of re-using or otherwise utilising the wastage should be explored. (para 51).

10. Any Ambar project, comprising both spinning and weaving should be so designed, organised and implemented, as to be related directly to the development and transformation of the village economy. (para 52).

11. The Ambar project should be incorporated with the progressive realisation of regional self-sufficiency and provide for the increase in consumption of Ambar cloth in local areas. This will greatly contribute to the realisation of the objective of doing away with the subsidy in the production of Ambar cloth. If an area or region undertakes any internal consumption, it should be given preference. (para 53).

12. The Ambar charkha should be manufactured on a fully decentralised basis, village carpenters from the Ambar areas should be trained and supplied only with the essential precision parts from a central agency; it should not be manufactured in any central factories or even in a number of manufacturing centres. (para 56).

13. The distribution of Ambar charkha sets should be subsidised to some extent. In the first instance, the Ambar charkha set should be charged at full cost to the spinner to whom it is supplied, the cost being payable in easy instalments over five years, free of interest. It should be open to the appropriate agency authorised by Government, when approximately half the cost has been recovered, to decide in the case of particular persons or class of persons as to whether any part of the remaining half of the cost should be treated as subsidy. One of the main criteria in deciding upon the subsidy should be the use made of the charkha. In order to be eligible for the subsidy, the user of the Ambar charkha must be able to demonstrate that the Ambar charkha has been gainfully used to approximately 75 per cent. of the rated capacity. (para 58).

14. Working capital should be provided, free of interest, for the manufacture and supply of Ambar charkhas, at the rate approximately of 50 per cent. of the cost of the charkha sets to be made and supplied in any one year; that is, an amount equal to six months' production. (para 59).

15. The daily wages earned at spinning should be kept under constant watch and studied by Government. A flat piece rate of 1½ annas a hank for all counts, for the present, would be reasonable, based on spinning counts, from 16's to 32's. (para 62).

16. The cost of training, depreciation and maintenance element in the cost of the Ambar charkha set itself, and the indirect subsidy given by Government by way of loans free of interest, should not be included in the built-up cost of Ambar yarn. (para 63).

17. The concept of "certification" by the Khadi Board should gradually give place to the concept of a normally decentralised village industry. Ambar cloth should ultimately take a natural and not a special place amongst the various kinds of cloth to be bought and sold. There should be ultimately no "certification" of looms by the Khadi Board, to keep Ambar cloth "pure". (para 65).

18. The scheme should be so organised as to ensure that yarn produced does not accumulate for want of weaving. (para 66).

19. Special effort should be directed at every point, towards a target, in the first instance, of bringing down the need for subsidy to a total of two annas in the rupee for Ambar cloth. (para 70).

20. Working capital should be provided, free of interest, at 60 per cent. of the annual production of Ambar cloth; *i.e.* Rs. 500 per Ambar charkha set, with a six monthly assessment of the requirements. The assessment should be made at least 3 clear months before the period for which the requirements are assessed. (paras 72 & 73).

21. The organizational aspects of the Ambar charkha and its use need a great deal of examination and consideration. (para 87).

22. The Ambar programme should be integrated with the Community Project Areas and National Extension Service and run by the C.P.A. wherever a C.P.A. or N.E.S. project is sufficiently established. (para 87).

23. Special attention should be given to training of both spinners and instructors. Training should be regular, systematic and sufficient. Six weeks of training followed by six weeks of practice is considered the minimum. The training scheme should keep pace with the plan for production. (para 89).

24. At the end of the 3 months' training, every spinner should have an Ambar charkha set in his home for immediate use, without break. (para 89).

25. Training should culminate in a test and certificate of proficiency. (para 89).

26. The full cost of training should be met by Government. (para 90).

27. The existing Khadi looms should all go over to Ambar yarn, as part of the first phase of the programme and the traditional charkha should be progressively replaced by the Ambar charkha. (para 92).

28. Any Ambar project, comprising both spinning and weaving should be so designed, organised and implemented that, as far as possible, existing handlooms are brought into the scheme to weave Ambar yarn, instead of new handlooms being set up specially for the Ambar yarn. (paras 92 & 97).

29. Next should be the looms now using mill yarn, in the neighbourhood of existing spinners of khadi yarn. (para 93).

30. For the year 1956-57, the scale should be about 75,000 Ambar charkhas in all; and the result should be further examined and a decision taken by Government by the end of December, 1956, as to

the scale of the scheme for 1957-58 and the probable scale for 1958-59; the figure for 1957-58 may be anything up-to about 2 lakhs of new Ambar charkhas. (paras 94 & 95).

31. The programme should be implemented, as far as possible, in areas where cotton is locally available and where handloom weaving is intensively practised; and where there is greater need for providing employment. (para 96).

32. Subject to organisational problems being solved in a practical manner, members of weavers' families should be trained and supplied with Ambar charkhas in preference to others; at least 75 per cent. of the spinners (other than the present spinners of traditional khadi yarn) should be from weavers' families, until nearly all such families have been provided with at least one, preferably two, Ambar charkha sets. (para 97).

33. Subject to organisational problems being solved in a practical manner, Ambar yarn produced for weaving should, except only for the training to be imparted, be spun only in the spinners' homes and not at spinning centres. (para 98).

34. The scheme should be progressively decentralized. The Central agency (Government or the Khadi and Village Industries Board) should limit its funcions to:—

(a) allotment of grants, subsidies, loans;

(b) advice and directions on technical and organisational matters;

(c) research and testing;

(d) a Directorate to watch and assess the progress for two years;

(e) co-ordination between the decentralised agencies;

(f) export;

(g) certification to the extent necessary. (paras 99 & 100).

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35. Government should set up a special section or a Directorate strongly staffed by persons qualified and experienced in the technical aspects, economics, statistics and administration of large scale organisation of village industries, including Community Project and co-operatives, to continuously and closely watch the progress of the scheme for the first two years. (para 100).

36. The Ambar programme should be organised through co-operatives. (para 101).

37. The market in Ambar cloth should be carefully watched and tested under Government supervision, in regard to the price at which Ambar cloth can find a ready market. (para 102).

38. The objective should be stated and established, of attaining the point where a subsidy will no longer be necessary for decentralised spinning and weaving. (para 102).

39. Government should, to the maximum extent possible, obtain its requirements of cloth from Ambar cloth; Government requirements should be linked to the production project directly through the

headquarters procurement organisation on the one hand and headquarters production organisation on the other. (para 103).

40. Apart from emporia in the larger capitals of the country, there should be a net-work of sales depots in districts and rural areas. (para 104).

41. Sample rooms may be opened under the marketing organisation in important cities and samples of items along with information about rates and ready stocks at different production centres may be kept in the sample rooms in order to secure orders and do wholesale business. (para 104).

42. Finishing and stocking centres for Ambar cloth will be needed as production increases. These centres should be planned now; and the possibility of degrees of specialisation examined. (para 105).

43. There should be adequate arrangements for quality control of yarn spun in bulk. (para 105).

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# II. TECHNOLOGICAL ASPECTS

## Analysis of data including replies received to Committee's questionnaire and Committee's conclusions thereon

### Laboratory tests.

Very soon, after the All India Khadi & Village Industries Board first approached Government with its proposal to manufacture yarn on a large scale with the Ambar charkha, Government directed the Textile Commissioner to have tests conducted on the charkha and the yarn produced by it at two textile research laboratories. These were the Ahmedabad Textile Industries Research Association. Ahmedabad and the Technological Laboratory under the Central Cotton Committee in Matunga. Both these laboratories actually started work sometime in August, 1955 and their interim reports were received by Government early in March, 1956. About that time, Government appointed this Committee. At its very first meeting a decision was taken that in addition to the laboratories at Ahmedabad and Matunga similar tests should be conducted at four other textile laboratories. These were Kala Bhavan, Baroda, the Bengal Textile Institute, Serampore, the Krishna Rajendra Silver Jubilee Technological Institute, Bangalore and the Government Central Textile Institute, Kanpur. On the 14th of March, 1956, the All India Khadi & Village Industries Board was requested to supply to these laboratories the latest model of the Ambar charkha as well as trained personnel for operating the charkhas. It might be mentioned that an improved model of the Ambar charkha was prepared by A.T.I.R.A. during the course of their experiments and was duly approved by the Board. The institutes agreed to conduct the tests and furnish the results to Government within two to three weeks of the receipt the Ambar charkha set, along with the trained personnel to operate them. It was hoped that reports from these institutes would be received well in time for the Committee to make use of the data, in reaching conclusions in their meetings held from the 21st to 89rd May, 1956. Unfortunately, however, the Board were unable to supply either the charkhas or the trained hands well in advance to enable them to send their reports by the 21st May, 1956. Since the previous tests conducted by the Matunga laboratory were on the standard model, the committee decided that it should also be requested to carry out a fresh series of tests with the improved model. But on account of the difficulties in supplying improved charkhas, cotton of a specified variety and trained personnel, the Matunga laboratory and the other institutes except the Textile Institute, Kanpur, were unable to furnish their reports in time. The Kanpur Institute, by special arrangement, conducted the tests with raw cotton locally available instead of the cotton of the specified type which was to be supplied by the Textile Commissioner. In order to furnish the report in time, they confined the tests to a period of 4 days.

*Scope and pattern*

2. At A.T.I.R.A. and Matunga the design of the tests was drawn up in joint consultation between the laboratories concerned, the Ambar Charkha Samiti of the Sarva Seva Sangh and a representative of the Textile Commissioner. In both places the tests were conducted under conditions as close as possible to those prevailing in the village. Neither the temperature nor the humidity was controlled. In fact, in A.T.I.R.A, a separate hut outside the main air-conditioned building of the Association was constructed for carrying out of the test, so that the findings might be as reliable and realistic as possible. The laboratories were requested to draw up a comprehensive scheme including the following points for testing:—

(i) mechanical condition of the charkha;

(ii) whether the charkha had suitable arrangements for producing cotton of different staple lengths and for varying counts, twist, etc.

(iii) production per spindle during an 8 hour day;

(iv) count of yarn;

(v) evenness, cleanliness of the yarn; as also the irregularity of twist and the count lea strength product;

(vi) percentage of waste;

(vii) number of men required on the various processes and the output that is possible thereby;

(viii) statistical analysis of the data and comparison with data for mill yarn;

(ix) quality of cloth woven on handloom with Ambar yarn and difficulties if any, experienced during the weaving process; and

(x) comparison of cloth produced from Ambar yarn with that produced on handloom with mill yarn.

3. In A.T.I.R.A., the experiments were conducted on five spinning sets and one handloom while in Matunga only one spinning set operated by one worker was used. The Matunga laboratory was not able to perform any weaving tests or cloth tests, because the only worker available with them left the laboratory in January, 1956 and the Board was not able to provide a substitute. The Matunga laboratory has reported that in the absence of a worker from the Board or the Ambar Samiti, further work, namely:—

(i) production of sufficient quantity of yarn for weaving;

(ii) study of the weavability of yarn;

(iii) determination of the fabric quality;

could not be undertaken.

The Laboratory, however, sent a special report on a few samples of Ambar yarn supplied to it by the Secretariat of the Committee from among the samples collected by it during its visits to the *Parishramalyas.*

### Field tests

4. In appreciation of the fact that the findings of laboratory tests are, by their nature restricted in the sense that they cannot be taken as of general applicability, Government, in consultation with the All India Khadi & Village Industries Board, set in motion a pilot project, whereunder work on the Ambar charkha could be done on a more extensive scale and under more or less field conditions. The scheme was sanctioned late in November, 1955 and the Khadi Board was, at its own request, permitted to have the pilot scheme worked through the agency of the Sarva Seva Sangh.

### Scope and pattern

5. Apart from six functional offices for training, administration, inspection, etc. the Board's pilot scheme envisaged:

(a) provision of an intensive six weeks' training course to 400 selected instructors in 15 *vidyalayas;*

(b) the establishment of 100 *parishramalyas,* all over the country, to provide intensive training and practice for a minimum period of six weeks each in the use of Ambar charkha and its accessories.

The object was to verify whether with six weeks' training and six weeks' practice, an average spinner could produce on the Ambar charkha, in an 8-hour day, eight hanks of yarn from carding to spinning, or sixteen hanks of yarn if only spinning was done. The second object was to determine the acceptability of the yarn to handloom weavers. This investigation was to be done by distributing Ambar yarn to handloom weavers and recording their re-actions.

6. As against a target of 15 *vidyalayas* and 400 instructors, 14 *vidyalayas* were actually opened and 354 workers trained.

7. As regards *parishramalayas,* according to the Khadi Board's plan, each was to be supplied with 60 Ambar charkha sets and each was to train 120 spinners. Actually as against 100 *Parishramalyas* sanctioned, the Board, with the same amount of money, opened 121 *parishramalyas* by reducing the size in a few cases. Even for the original 100 *parishramalyas,* at the rate of 120 spinners per *parishramalya,* their total capacity should have been 12,000 trainees. As against this, however, 4,886 trainees in all were admitted, of whom only 3,640 continued to the end. This would imply that about a little less than two-thirds of the capacity of the *parishramalyas* remained unutilised and only a little over one-fourth of the capacity was fully utilised. Due to the poor response in the beginning, even the majority of trainees who were ultimately admitted could not complete the full course of prescribed training and practice of 90 days. This fact, the Board states in its report, has affected the results in regard to the productivity. Due to various reasons, the full contingent of Ambar Charkha sets *i.e.,* 60 per *parishramalya* could not be supplied.

8. In regard to the class of persons who responded to the Board's call, it has been stated in the Board's report that the majority were new spinners and the number drawn from weavers' families was insignificant. One more fact emerged according to

extensive scale in arriving at ultimate conclusions. Both intensive and extensive efforts should be made for improvements in the design of the Ambar charkha, both in the spinning unit and in the *belni.* A design competition for the spinning unit to conform *inter alia* with Gandhiji's specifications (described in Appendix I) should be organised by Government. Much more experiment and testing should be done on productivity of yarn on the Ambar charkha, to see if it can be more than 6 hanks a day after 3 months' training and practice. Experiments should be conducted to reduce the wastage in spinning to the minimum and possibilities of re-using or otherwise utilising the wastage should be explored.

14. The general remarks offered by A.T.I.R.A. on the question of yarn quality are pertinent in this context. They have prescribed three conditions, which in their opinion must be fulfilled before yarn spun on the Ambar charkha can be satisfactory. These are:—

(a) various parts in all the three units of the set should strictly conform to the specified sizes laid down for each of them;

(b) all the settings and other details should be carefully checked, before and in the course of working, by means of standard gauges; and

(c) processing instructions should be followed carefully.

Experience with experiments at A.T.I.R.A. showed that whenever one or more of the above conditions were not observed, the yarn quality deteriorated, particularly in point of variation, in count strength and uniformity. It is, therefore, absolutely necessary for the efficient operation of the Ambar charkha and for production of good quality yarn that each Ambar charkha set is properly tested before it is supplied to the spinner.

15. On the question of precision parts, both of wood and of iron, the three laboratories, at Ahmedabad, Matunga and Kanpur have advised that these should not be left to the village artisan but should be manufactured according to standard specifications by skilled technicians in mechanised workshops. While there can be no doubt that the manufacture of essential precision parts should be centralised, this Committee is emphatically of the view that the Ambar charkha unit itself, excluding its precision parts, should be manufactured on a fully decentralised basis. The Committee would go to the extent of saying that even at the cost of some delay in the implementation of the programme as a whole, decentralisation of the manufacture of the Ambar charkha should be encouraged and fostered to the greatest extent possible. Village carpenters and black smiths from the Ambar areas should be properly trained. In fact, it will be a good idea to depute one or two trained technicians to a group of villages for giving adequate guidance to the local carpenters and black-smiths. These artisans will not only be able to produce the required number of Ambar charkhas but will also be in a position to help in the manufacture and repair of other types of equipment needed for village industries. They would also be of help in the manufacture and repair of agricultural implements needed by the peasants. This will, in a manner, become a nucleus

(g) report from the Director of Industries, Andhra, on tests on Ambar yarn, conducted by the Textile Institute, Madras (Appendix IX.);

(h) report received from Shri Vasavada on the weavability of Ambar yarn supplied to handloom weavers in Gujerat (Appendix IX.);

(i) report from the All India Khadi & Village Industries Board on the field tests conducted in 84 *parishramalyas* (Appendix VII.);

(j) replies to Committee's questionnaire on technical aspects of Ambar charkha from A.T.I.R.A., Technological Laboratory, Matunga and the Textile Institute, Kanpur (Appendix IV.).

### The Ambar Charkha set

11. The Technological Laboratory, Matunga, where tests were conducted on the standard model of the Ambar charkha have reported that some of its components require modification. According to them, the *dhunai modia* or carding unit ruptures the fibre and should either be modified or discarded. They consider the Ambar *belni* a useful device but they fear that it is the *belni,* in its present form, which is mainly responsible for the irregularity and unevenness of yarn. The spring and string-weighting on the 2 pairs of the rollers cause slippage and stickiness of the sliver. The ring-frame too, in their view is lacking smooth movement.

12. Fortunately, during the course of their tests and experiments with the standard Ambar charkha, the A.T.I.R.A. Laboratory found a remedy for some of its short-comings by modifying the defective parts. Details of all the modifications made are given in Appendix VI. Subsequent to the designing of the improved model, A.T.I.R.A. have reported that they did not have much difficulty in spinning yarn in the count range of 12's and 20's. In regard to the *dhunai modia,* they have recorded an opinion to the effect that in its improved form it does not cause any significant damage to cottons of short-staple lengths. The carding of long staple cottons like *Rajapalayam* is still unsatisfactory and A.T.I.R.A. are attempting further modifications to minimise the shortcomings.

13. The Committee considers that while the Ambar charkha marks the culmination of a search for and effort towards designing a suitable unit for decentralised production of yarn, it is only at the beginning of its evolution as a model. There is much scope for further improvement in the Ambar charkha to make it an efficient instrument of production. Experiments must, therefore, be continued. The need for cautious advance is apparent. While the Ambar charkha undoubtedly seems to have immense possibilities in enabling the decentralisation of an industry producing a commodity essential next only to food; and in providing greater gainful employment particularly in villages, there is justification for a balanced optimism but also need for cautious advance and most careful organisation both in the field and at headquarters. There is also need to carry out further field experiments on an intensive and

extensive scale in arriving at ultimate conclusions. Both intensive and extensive efforts should be made for improvements in the design of the Ambar charkha, both in the spinning unit and in the *belni.* A design competition for the spinning unit to conform *inter alia* with Gandhiji's specifications (described in Appendix I) should be organised by Government. Much more experiment and testing should be done on productivity of yarn on the Ambar charkha, to see if it can be more than 6 hanks a day after 3 months' training and practice. Experiments should be conducted to reduce the wastage in spinning to the minimum and possibilities of re-using or otherwise utilising the wastage should be explored.

14. The general remarks offered by A.T.I.R.A. on the question of yarn quality are pertinent in this context. They have prescribed three conditions, which in their opinion must be fulfilled before yarn spun on the Ambar charkha can be satisfactory. These are:—

(a) various parts in all the three units of the set should strictly conform to the specified sizes laid down for each of them;

(b) all the settings and other details should be carefully checked, before and in the course of working, by means of standard gauges; and

(c) processing instructions should be followed carefully.

Experience with experiments at A.T.I.R.A. showed that whenever one or more of the above conditions were not observed, the yarn quality deteriorated, particularly in point of variation, in count strength and uniformity. It is, therefore, absolutely necessary for the efficient operation of the Ambar charkha and for production of good quality yarn that each Ambar charkha set is properly tested before it is supplied to the spinner.

15. On the question of precision parts, both of wood and of iron, the three laboratories, at Ahmedabad, Matunga and Kanpur have advised that these should not be left to the village artisan but should be manufactured according to standard specifications by skilled technicians in mechanised workshops. While there can be no doubt that the manufacture of essential precision parts should be centralised, this Committee is emphatically of the view that the Ambar charkha unit itself, excluding its precision parts, should be manufactured on a fully decentralised basis. The Committee would go to the extent of saying that even at the cost of some delay in the implementation of the programme as a whole, decentralisation of the manufacture of the Ambar charkha should be encouraged and fostered to the greatest extent possible. Village carpenters and black smiths from the Ambar areas should be properly trained. In fact, it will be a good idea to depute one or two trained technicians to a group of villages for giving adequate guidance to the local carpenters and black-smiths. These artisans will not only be able to produce the required number of Ambar charkhas but will also be in a position to help in the manufacture and repair of other types of equipment needed for village industries. They would also be of help in the manufacture and repair of agricultural implements needed by the peasants. This will, in a manner, become a nucleus

for imparting technical education to the villager and will help in the diffusion of technique and in re-orientating his mind towards technical and mechanical skills. The development of this aptitude will also stand the peasants in very good stead when, with the expansion of rural electrification, mechanical and technical skills will be in great demand. In connection with the training of village carpenters and black-smiths for the decentralised manufacture of Ambar charkhas, it would also be useful to have one or two workshops for a group of villages which could act as servicing units. These workshops should be fitted with the requisite tools and equipment and perhaps trained technicians could be attached to them.

16. This leads on to another question which was included in the questionnaire issued on the technical aspects of the Ambar charkha. The laboratories that had conducted tests on the Ambar charkha were asked to give their views about the possibility of adjusting the Ambar charkha for being worked with electricity. While the Matunga Laboratory has answered in the affirmative, A.T.I.R.A. and the Textile Institute, Kanpur, have stated that experiments will have to be designed to test this point and substantial modifications might become necessary.

17. A question was raised about the fatigue factor. One of the terms of reference of the Committee runs as follows:—

> "Whether a normal adult can work the Ambar charkha set for 8 hours, with reasonable intervals of rest, say 15 minutes after every 2 hours and a recess of one or two hours after four hours, without any particular feeling of fatigue"?

Experiments carried out at A.T.I.R.A. and Matunga do not throw much light on this aspect of the problem. The Textile Institute, Kanpur, in dealing with this question have stated that conditions of work in cottage industries are very different from the regimented conditions of work obtaining in factories. When spinning is done in the cottages, workers can take rest according to their convenience and work during hours when the strain is comparatively less.

The majority view (six members) on the question is a categorical "yes", with the comment that the conditions in which the Ambar charkha will be worked specially in village homes are entirely different from the regular and comparatively regimented work periods in mills. Of the minority, one member answers with a categorical "no" on the data available; while two consider that the fatigue element should be tested comparatively with ordinary industrial working conditions and that for this there is not enough data on which to judge.

### Quantitative production of yarn

18. According to information furnished by the Matunga Laboratory where experiments were conducted on the standard model, the out-put of 20's, when work is restricted to spinning only, comes to 16·4 hanks in an 8-hour day. If account is taken of preparatory processes exclusive of the time taken for repairs and adjustments

for counts etc., the output falls to 5·2 hanks per day. If the time taken for reeling is reckoned with, the output is only 4·4 hanks; and if the total time taken for all preparatory processes, as also time for repairs and adjustments is taken into account, the output is further reduced to only 4 hanks per 8-hour day.

19. A.T.I.R.A.'s findings on this point, as given in the final report, are much more encouraging. On the improved latest model of the Ambar charkha, the average production of yarn of 20 counts in an 8-hour day ranged between 12·4 and 34·9 hanks, when only spinning was done. If all three processes, *viz.*, carding, slivering and spinning are taken into account the average output of yarn of 20 counts ranged between 4·0 and 8·9 hanks. Taking the production of all the 5 spinning units as a whole, the average quantity, for spinning only, worked out to 18·4 hanks and output for all the three processes, taken together worked out to 5·6 hanks.

20. According to the special test conducted by the Textile Institute, Kanpur, the findings on the question of quantitative production indicate that a person devoting his full time to spinning only can produce 6·25 hanks to 8·2 hanks in 4 hours. This figure is confirmed by their reply to the questionnaire. Before finalising their replies to the questionnaire, the Textile Institute, Kanpur had experimented with the Ambar charkha for a period of three weeks.

21. According to the field tests conducted by the All India Khadi and Village Industries Board, the all India average productivity per spinner for an 8-hour day comes to 5·12 hanks. This has been calculated by dividing the total production by the total number of hours and then multiplying the result by 8. The total production is that of the entire period for which the pilot project was run. In consultation with the Khadi Board, it was agreed that it would be desirable to calculate the productivity on the work of the last fortnight only, in the belief that in the last fortnight the spinners would have completed their full three months' training and practice. But because of late admission and falling-off of trainees during the course and the fact that trainees were admitted right till the end, the last fortnight's figures ceased to have any significance. The Committee's secretariat did collect such statistics. The total production during the last fortnight was 2,38,431 hanks and the total number of spinning hours was 3,58,125. The output per hour worked out to 0·66 hanks or 5·28 hanks per 8-hour day.

22. The above data was considered by the Committee. In the case of experiments conducted by Matunga, it was observed that the tests had been carried out with the help of a single worker. Even in A.T.I.R.A., the tests were confined to 5 charkhas operated by 5 workers.

In the case of the findings of the pilot project under the Board, the Committee noted that the very great majority of spinners had not completed the full 6 weeks' training followed by 6 weeks' practice. It was obvious, therefore, that the productivity figure as worked out by the Board was not a correct assessment. If the full 3 months' training and practice had been afforded to the spinners the productivity figure would have been higher. Correlation between training and output is apparent from some statistics furnished in the Board's report on the working of the pilot project. Those who barely completed training and had no practice showed an average output of 4 hanks per day. Those who had full training and about 4 weeks of practice showed an output of 5·2 hanks per day. Those who had the full training of 6 weeks and over 4 weeks' practice gave an output of 6 hanks per 8-hour day on an average and the productivity of some of them was much above the 6 hank figure. As for the laboratory tests, since they were restricted and covered only the performance of a very small number of spinners, over the short period of about 10 or 12 days, it cannot be safely assumed that their results would be strictly applicable to the general situation. Differing conditions, the human factor and an element of motivation supplied by the wage-earning factor would necessarily influence the output over a larger field. Moreover, both in the field and in tests carried out at Kanpur and Matunga, the standard and not the improved model of the Ambar charkha were used. This fact inevitably depressed the productivity. Taking the above factors into consideration, the majority view is that the Ambar charkha can give a production of 6 hanks, on an average, from cotton to reeling. Of the majority (six), one considers that the daily output would be between 6 hanks and 8 hanks. All the six consider that the figure of 6 hanks could probably be improved upon, by more practice and further experimenting. Some of the members (three) feel that on the basis of data, so far obtained, the figure of 6 acceptable to the majority does not give a correct assessment. In the first place, according to these members, the calculations of the Board were only approximate. Further the calculations did not take into account the time taken for reeling and were based on a one-hour unit. They think that experiments should be carried out for a number of days with the spinners working for 8 hours daily. The one-hour unit as adopted by the Board tends, in their view to inflate the final figure. According to one of the minority of three, though the experiments and data are inadequate yet on the basis of whatever material is available, the production may be taken as between 4 and 5 hanks. One considers that the productvity figure should be 5 and the other between 5 and 6, with possibilities and room for improvement.

23. The Committee is unanimous that productivity for spinning only would be about double that of cotton to reeling.

24. On the whole, the entire Committee considers that much more experimenting and testing should be done on the productivity of yarn on the Ambar charkha to see if it can be more than 6 hanks a day after 3 months of training and practice. There should be an annual review, with special attention to technical improvements, quality of the product and productivity. The Committee is of the view that there is need to continue and carry out further field experiments on an intensive and extensive scale for arriving at ultimate conclusions. In order to help in making a proper assessment, it is recommended that Government, should immediately set up a Textile Research Centre, adequately equipped and staffed, devoted mainly to the decentralised textile industry. Regional centres should be set up in due course.

## Count range in Ambar yarn

25. The question which has been put to the Committee is whether the tools or machines are capable of producing yarn of coarse, medium and fine counts, the range being 6 to 18, 18 to 32 and 32 to 48. While there have been a few cases of spinners producing yarn of very fine counts, even up to 80's, on the Ambar charkha, production of yarn of fine counts is not very well suited to the mechanics of the Ambar charkha in its present form. An interesting fact which was brought to the notice of the Committee by the Secretary of the Ambar Samiti was that if the spinners were given their choice they always preferred the higher counts of 24's, 32's and 40's. By and large, however, the Ambar charkha is best suited for the low and medium counts up to 24's. But as a machine, it is certainly capbale of producing cotton yarn up to 48's and even higher counts. To determine whether finer counts can be spun on a mass scale, there is no data available. Bulk production so far has been up to 24's. If high grade cotton is supplied to the spinner, the production of yarn up to 48 counts would not present any serious difficulties.

## Quality of yarn and its weavability

26. According to the tests carried out by Matunga, Ambar yarn is fairly clean but a little over-twisted. They have qualified their finding in regard to cleanliness with the remark that cotton used for spinning was clean lint and not the ordinary commercial baled cotton. As against the maximum count variation of 10%, normally accepted, the count variation in Ambar yarn was generally found to be within 6%. For testing lea strength 7 types of cotton were used by Matunga for spinning yarn of 20s. H 420 gave a minimum lea strength of 41:4 lbs., while *Vijay* gave a maximum lea strength of 79·1 lbs. The Matunga authorities have also stated that the yarn is capable of passing through the reeds during weaving.

27. According to A.T.I.R.A., Ambar yarn is fairly clean and smooth. In appearance it is comparable with mill yarn normally available in the market to professional handloom weavers, samples of which were supplied by the Textile Commissioner for comparison. Count variation for yarn of 20's spun out of *Vijay* cotton was 7%. Lea strength for yarn of 20's was 84·6 lbs. A.T.I.R.A's findings indicate that Ambar yarn is capable of passing through the reeds during weaving without many breakages. End-breaks in spinning per hour on 4 spindles range between 0·64 and 2·24. As for irregularity percentage, it was 14·6 at low speed and 16·4 at high speed. The irregularity percentages for mill yarn supplied by the Textile Commissioner ranged between 13·3 and 18·7 at low speed and between 15·2 and 21·2 at high speed. Winding breaks per hour in the case of Ambar yarn averaged 96:3 and for mill yarn normally supplied to handloom weavers it ranged between 102·4 and 156·7. On the question of turns per inch, while it was 19·3 for Ambar yarn, it ranged between 18·3 and 22·1 for mill yarn usually supplied to handloom weavers. A.T.I.R.A. have reported that on the score of co-efficient of variation in lea strength, samples of mill yarn supplied by the Textile Commissioner were on the whole inferior to Ambar yarn. A.T.I.R.A. have, however. simultaneously pointed out that composite

mills dispose of their low quality yarn for handloom weaving. They conclude that adequately trained spinners can produce on the improved Ambar charkha yarn of 20 counts from pure *Vijay* cotton, of a quality comparable with the 19's to 20's produced by the composite mills out of cotton mixings which are generally inferior in quality.

28. The Textile Institute, Kanpur, have stated that sufficient tests have not been performed by them to give any definite opinion on the question of appearance of yarn, count variation and tensile strength. But the yarn is capable of passing through the reeds during weaving, although due to variation in counts there are many breakages. According to the Kanpur institute, the lea strength of Ambar yarn of 18 counts is 60 lbs. and according to the Textile Institute, Madras, the lea strength of Ambar yarn samples tested by them ranged between 39.6 and 40.16 lbs.

29. As regards weavability of Ambar yarn, the Matunga Labotory was unable to conduct any tests. A.T.I.R.A's findings are given in Tables I and II appended to this chapter. It will be observed that the rate of weaving per hour in the case of Ambar yarn was higher than in the case of mill yarn and the breaks per loom hour in the case of mill yarn were more than in the case of Ambar yarn. A.T.I.R.A. have, however, cautioned that no significance can be attached to this, on account of insufficient number of tests on one loom only.

30. The Director of Industries, PEPSU, arranged for two experiments to be conducted. In one case, all the preparatory processes were done according to traditional methods but the actual weaving was done on a fly-shuttle loom. In the second experiment, all the processes adopted were those normally followed by the fly-shuttle handloom weaver. While the first experiment stood the strain and it was possible to weave cloth of normal quality, in the second experiment, breakage of warp threads was extensive. The statistics relating to these two tests are appended in Table III. In the first experiment with Ambar yarn, 10 yards of cloth of satisfactory quality were woven in 8 hours, whereas in the second experiment, 2½ yards of unsatisfactory quality were woven during the same period. The output with mill yarn of the same count was 14 yds. in the same unit of time *i.e.* 8 hours.

31. The weaving tests conducted under the supervision of Shri Vasavada were on about 50 lbs. of yarn supplied by the Board from their *Parishramalaya* at Nadiad. Two handloom weavers who were used to work with mill yarn did the weaving on fly-shuttle looms. The results of these tests are given in Table IV appended at the end of this chapter. The average production per hour in the two experiments was 1 yard and 1¼ yards, and the end breakages were 40 and 28. Both experiments were conducted with Ambar yarn and no comparison was attempted with mill yarn of equivalent counts.

32. About 25 lbs. of yarn were supplied to the Joint Director of Industries, U.P., for conducting similar tests. His report is as follows:—

(a) high twist of yarn and unevenness cause difficulties in winding, warping sizing and weaving and there were many breakages;

(b) out-put of cloth was less than in the case of mill yarn;

(c) Ambar yarn is more adaptable to warp sizing rather than hank sizing.

33. The Joint Director of Industries, U.P., has added that the difficulties were greater on account of the hot summer weather when the tests were conducted. His anticipation is that the yarn would weave better during the rainy season. He has also reported that two of the weavers who had no experience whatsoever of handspun yarn and warp sizing found the weaving even more difficult.

34. The All India Khadi and Village Industries Board has also submitted a report on weavability. The Board distributed Ambar yarn to almost all important regions in the country. At the time of reporting, however, information had not been received from 9 regions. The Board's data covers 50 weavers from Nadiad, Karnatak, Maharashtra, Gujrat, Tamilnad, Bihar and Saurashtra. Of the reports on these 50 weavers, 9 were rejected for various reasons. In effect, therefore, the findings of the Board are based on the work of 41 weavers. Of these 41 weavers, only 17 were persons who had previous experience of weaving with mill yarn. The majority of weavers used the fly-shuttle loom. The Board has given statistics only in regard to the count of yarn used (12's to 24's), the texture and the productivity. On important items like number of hanks used for warping and yarn breaks during winding prior to warping, breaks while warping, breaks while sizing and breaks per loom-hour, the Board's report is silent.

35. The Committee feels that the All India Khadi & Village Industries Board has not paid to the weaving aspect of the experiment, the attention it deserves. It is also unfortunate that only 17 out of the 41 weavers who were enaagaged in the weaving tests were professional hand-loom weavers, accustomed to mill yarn. On the other hand, one of the main purpose of the pilot project was to assess the acceptability of Ambar yarn to professional hand-loom weavers.

### Texture of Ambar cloth

36. In Ambar cloth, the ends ranged from 24 to 48 per inch, though in most cases the minimum did not fall below 40. Picks per inch ranged from 24 to 58 but for the majority of weavers (31), the minimum was 42 picks per inch. In cloth woven from mill yarn, ends per inch ranged between 20 and 48 but for the majority of weavers, the minimum did not fall below 44 ends per inch. Picks per inch ranged from 20 to 50 but for the majority of weavers, the minimum was 42 and more per inch.

51. Figures regarding productivity in weaving as it emerged from the Board's report are given in Table V at the end of the chapter. The data establishes that productivity in weaving per unit of time in the case of Ambar yarn is less when compared to mill yarn.

38. On the question of productivity in weaving, the Committee is agreed that the number of yards of cloth that can be woven per hour with Ambar yarn is less than that from mill yarn. Some feel, however, that it would be risky to draw conclusions of major importance on the results of tests conducted on a few looms for a few days. The only fact that is obvious is the disparity of the output between mill yarn and the Ambar yarn, Ambar yarn output being less than that of mill yarn. Some are of the view that further experiment is very necessary, particularly since the findings in regard to productivity are based upon yarn produced by comparatively inexperienced trainees. On the whole, however, there is general agreement amongst the Committee that as compared with mill yarn, productivity of Ambar yarn in weaving is less and may vary from 5% to 25% less than in the case of mill yarn. One member has assessed the production of Ambar yarn at an average of 12 yards per day on a fly-shuttle loom but is unable to compare it with mill yarn. Another member feels that there is not enough data at all to come to any conclusion on the point. Another member considers that Ambar yarn so far used in weaving is limited by being produced by spinners with inadequate experience and perhaps inadequate training. The use of Ambar yarn on handlooms as compared to mill yarn has not been sufficiently tried out or established. This under-lines the fact that the stage is too early and a great deal more experimentation and experience is necessary before any definite conclusions can be reached. The experimental steps of the scheme should not only continue for some time longer; but this experiment should be on an increasing scale. This also emphasizes the need for immediately establishing a textile research centre devoted to the cause of decentralised spinning and weaving, of which mention has been made earlier. There should also be adequate arrangements for quality control of yarn, spun in bulk.

39. In arriving at conclusions, the Committee is very conscious of the fact that the yarn tested was the product of trainees and therefore, it is necessary to give a margin on this account. By the very nature of things, the Ambar scheme being in its infancy, it was not possible to obtain yarn produced by experts. The results of the tests, therefore, have to be viewed in this background and the fact kept well in mind that the pilot scheme of the Board was for training and testing and not a production project; that production was really incidental.

40. The majority (six) consider that the data assembled and experience gained would indicate that Ambar yarn is fairly even and strong for the purpose of weaving on handlooms; four of them consider that the data already available is reasonably adequate, while the other two add the rider, that further experiments should be carried on to confirm the position. Of the minority (three), one feels that the data and experience so far are inconclusive; while two consider that on the data available, Ambar yarn is neither even enough, nor of the right strength for use on handlooms. One member abstained from expressing any opinion.

41. One other question is relevant in the context of weavability. What kinds of cloth, of specified reeds and picks, could be woven on the handloom from Ambar charkha yarn and which from mill yarn?

The majority (six) consider that by and large, the same kinds of cloth of equivalent reeds and picks and within the yarn counts, already considered as suitable, can be woven from Ambar yarn as from mill yarn but two of them consider it necessary to make a reservation as to the quality of cloth as compared to that woven from mill yarn. Of two others who have expressed an opinion, both consider that whereas cloth of a sort can be woven from Ambar yarn on handlooms, no conclusions can be drawn as to quality. One of the two feels that heavy reed/picks cloth which can be woven from mill yarn cannot, in any case, be woven from Ambar yarn.

### Availability of cotton for producing different counts of yarn and varieties of cotton most suitable for spinning different counts with the Ambar charkha set.

42. Making sufficient quantities of cotton available for the additional production of cloth, during the Second Plan period, is an overall problem which has to be tackled whether the additional yardage is manufactured by mills or in the decentralised sector. The estimated additional requirement of cloth, *viz.*, about 1,500 million yards will require an additional 10-11 lakh bales of Indian cotton. It is true that for the production of coarser counts of yarn, the quantity of raw cotton that will be required will be a little more. But the difference is not significant. In 1955, the total production of cloth in the country came to about 6847 million yards consisting of 5,094 million yards from the organised mill sector, 273 million yards from the power-loom sector and 1,480 million yards from the hand-loom sector besides 30 million yards of khadi. For this quantity, the total consumption of cotton, both Indian and foreign comes to about 47 to 48 lakh bales. Out of this about 41 to 42 lakh bales is Indian cotton. The Committee took note of the fact that about 3 lakh bales of cotton below 11/16" staple length is exported and occasionally special licences are given for the export of staple lengths between 11/16" and ¾". It also noted that the import of foreign cotton during the last few years has been progressively decreasing. The Committee noted also that the total 1953-54 crop was of the order of 40 lakh bales and in the current season the yield is expected to be between 42 to 44 lakh bales. During the period of the Second Plan, the production of raw cotton is expected to be raised by 14 to 15 lakh bales, bringing the total production to 55 lakh bales of cotton. The Committee is, therefore, of the view that subject to the import-export programme, the kinds of cotton cultivated and encouraged for growing and the achievement of the Second Plan targets for cotton production, as a whole, enough cotton will probably be available for all the additional requirement of cloth between 1956-57 and 1960-61. It follows, therefore, that sufficient cotton will be available for all the decentralised spinning that can be organised.

43. Earlier, it has been recommended that generally speaking, yarn produced with the Ambar charkha should be upto 24 counts, since this charkha is best suited for the manufacture of yarn upto this count. In the background of this, the Committee is unanimously of the view that all the commonly known varieties of cotton, of staple lengths between ¾" to ⅞" are well suited for the Ambar charkha. The Committee's attention was drawn to the fact that the current tendency is to encourage the cultivation of longer staple

cotton. Some adjustments in the irrigation policy in regard to the staple length of cottons cultivated, appears necessary in order to ensure that cottons of staple lengths ¾" to ⅞" which are well-suited for the Ambar Charkha are made available in the required quantities. As has already been stated earlier, the additional requirement of raw cotton, within this staple range will be of the order of 10 to 11 lakh bales.

44. It is recommended that the Ambar programme should be implemented, as far as possible, in areas where cotton is locally available. Growing of cotton of staples, suitable for the Ambar charkha, 3/4" to 7/8" should be encouraged in all villages as part of a drive for self-sufficiency in the Community Projects and agricultural programmes.

## Wastage in Spinning and weaving

45. So far as waste in weaving is concerned, there is hardly any significant data. The only laboratory that experimented on this aspect is the Ahmedabad Textile Industries Research Association, Ahmedabad. Even their data is based on only two items of weaving. In one case, wastage for Ambar yarn was 0.75% and in mill yarn, it was 0.78%. In the second experiment, wastage for Ambar yarn was 0.59% and for mill yarn 0.80 per cent.

46. Neither has any adequate data been made available by the Board's pilot project. Even in the handloom industry such data has never been maintained. One member feels that in the handloom industry, since hand-processes are involved, the wastage is insignificant whether mill yarn or hand-spun yarn is used.

47. In the absence of data, it is not possible to draw any useful conclusions.

48. In spinning yarn with the Ambar charkha, according to rough and approximate calculations made by the Ambar Samiti, about 1/3 of the total waste can be ploughed back for spinning yarn of very coarse counts for making ropes or sacking cloth. Of the laboratories that conducted experiments in wastage in spinning Ambar yarn, the Matunga findings indicate that the wastage varied from 6.2% to 26.8% depending upon the kind of cotton used. According to A.T.I.R.A. the average waste on the *dhunai modia* works out to 8·2% and on the *belni*, to 4·9%. A.T.I.R.A. are of the opinion that it is possible to reduce the wastage during processing with *belni*, as almost all the waste is avoidable if the worker is careful. They have also expressed the view that total spinning waste with Ambar yarn compares well with the average wastage in spinning mills because of the blow-room processes in the latter. On the basis of experiments conducted by the Textile Institute, Kanpur, the average waste in spinning works out to 12½%.

49. Mill wastage is estimated between 15 to 20%, of which a portion is marketable.

50. The Committee is generally agreed that for equivalent counts, using similar quality of cotton, whereas mill waste averages

17½% similar waste from Ambar charkha ranges between 12% to 15% on the average. Of the 17½% mill waste, about 1/3 is trash and the remainder *i.e.* between 11% and 12% is marketable. In the case of Ambar wastage, there is no adequate data, to indicate as to what portion of the waste can either be re-used in the spinning process itself or otherwise. One member considers that of the mill-waste, 50% *i.e.* 1/2 and not 1/3 is unusable. One member disagrees with the estimate of 12½% to 15% in the case of Ambar yarn and he is of the opinion that the percentage of waste is on an average, 15%.

51. Dearth of sufficient research and significant material on this aspect of wastage leads to the conclusion that experiments to correctly assess this factor should be continued. Experiments should also be conducted to reduce wastage in spinning to the minimum and possibilities of re-using or otherwise utilising the waste should be explored.

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TABLE I

## Comparative Weaving Qualities of the Ambar and the Mill Yarns

(A.T.I.R.A.)

| Quality particulars | | Ambar yarn | Mill Yarn | | | Remarks |
|---|---|---|---|---|---|---|
| | | | (*a*) | (*b*) | (*c*) | |
| **Breaks per Hank (Average)** | Winding. | 3·20 | 3·50 | .. | .. | Though Ambar yarns show fewer breakages no significance can be attached to the differences on account of the insufficient number of tests on only one handloom. |
| | Warping | 0·13 | 0·21 | .. | .. | |
| | Sizing | 0·24 | 0·41 | .. | .. | |
| | weft filling. | 2·20 | 3·55 | .. | ... | |
| **Breaks per loom hour (Average).** | | 0·28 | 0·47 | .. | .. | |

## TABLE II

## Preparatory and weaving performances of the Ambar and the Mill Reeling Yarns.

(A.T.I.R.A.)

| | First Set | | Second Set | |
|---|---|---|---|---|
| | Mill Reeling yarn | Ambar yarn | Mill Reeling yarn | Ambar yarn |
| Period | 14th to 22nd Feb 1956 | 17th to 23rd Feb., 1956 | 24th to 27th Feb., 1956 | 28th Feb. to 1st March, 1956 |
| Number of hanks used for warp . | 32 | 27 | 28 | 30 |
| Number of hanks used for weft . | 28 | 23 | 27 | 29 |
| Breaks per hank of warp while winding prior to warping . | 3·8 | 3·5 | 3·2 | 2·9 |
| Breaks per hank of warp while warping . . . . . | 0·28 | 0·26 | 0·14 | 0 |
| Breaks per hank of warp while sizing . . . . | 0·47 | 0·11 | 0·36 | 0·37 |
| Breaks per hank of weft while filling pirns . . . | 3·4 | 2·1 | 3·7 | 2·3 |
| Length of cloth woven in yards . | 13·75 | 11·75 | 11·75 | 12·0 |
| Time for weaving . . . . | 9 hours | 6 hours | 7·5 hours | 7·25 hours |
| Rate of weaving yards per hour | | | | |
| (i) Only weaving . . | 1·53 | 1·96 | 1·57 | 1·66 |
| (ii) Weaving including preparatory process . . | 0·63 | 0·70 | 0·59 | 0·60 |
| Breaks per loom hour . . . | 0·55 | 0 | 0·40 | 0·55 |
| Ends/Picks . . . . . | 46/46 | 46/46 | 46/46 | 46/46 |

# TABLE III

## *DIRECTOR OF INDUSTRIES*

## P.E.P.S.U.

## EXPERIMENT NO. I

## ABMAR CHARKHA YARN TEST WEAVING ON FLY SHUTTLE LOOM WITH PRIMITIVE AND PREPARATORY PROCESSES

| S. No. | Name of Process or Specifications | Particulars | Remarks |
|---|---|---|---|
| 1 | Sizing | 7 Hours | Note I<br>Wife of the weaver worked with him jointly, when he commenced weaving. She supplied the ready made pirns. |
| 2 | Winding warp | | |
| 3 | Warping | | |
| 4 | Drawing & Beaming | 2 hours. 40 mts. | |
| 5 | Fitting up warp on loom. | 1 hour. | |
| 6 | Length of warp. | 16 yds. | Note II. |
| 7 | Width of warp cloth | 30". | One yd. piece of cloth produced is enclosed. |
| 8 | Count of warp Yarn | 14 s. | |
| 9 | Count of weft yarn | 14 s. | |
| 10 | Reeds or No. of ends per inch. | 42 | |
| 11 | Average No. of picks. | 41/42 | |
| 12 | Production per 8 hours | 10 yds. | |
| 13 | Wages earned for fabrication | Re. 1/9/- at -/2/6 per yd | |
| 14 | Quality of cloth | Satisfactory. | |
| 15 | If bad selvedge give reasons. | No Problem. | |
| 16 | If defective cloth whether due to uneven or faulty yarn, uneven packing, faulty workmanship, breakage of warp threads or any other fault | No Comment. | |
| 17 | Misc. information | In all weaving processes took 13½ hours to finish the warp and cloth produced was 15½ yds. | |

### TABLE III—(*contd.*)

### *DIRECTOR OF INDUSTRIES*
### P.E.P.S.U.

### EXPERIMENT NO. 2

### AMBAR CHARKHA YARN TEST WEAVING ON FLY SHUTTLE LOOM WITH USUAL PREPARATORY PROCESSES

| S. No. | Name of process or specifications | Particulars | Remarks |
|---|---|---|---|
| 1 | **Sizing** | 4 hours. | Weaver was assisted by another weaver who co-jointly worked with him except in weaving. He supplied him ready made pirns while the master weaver was weaving. |
| 2 | **Winding warp** | At an average of 2¼ hrs. (800 yds. per hour.) | |
| 3 | **Warping** | 1½ hours. | |
| 4 | Drawing and Beaming | 7 Hours. | |
| 5 | Fitting up warp on loom. | 2 hours. | |
| 6 | Length of warp. | 20 yds. (issued 5 lbs. of yarn). | One yard of cloth is enclosed. |
| 7 | Width of warp cloth | 30″. | |
| 8 | Count of warp yarn. | 14s. | |
| 9 | Count of weft yarn. | 14s. | |
| 10 | Reeds or No. of ends per inch. | 40s Reed and about 40 ends in cloth per inch. | |
| 11 | Average No. of picks per inch. | 32/34. | |
| 12 | Production per 8 hrs. | 2¼ yds. | |
| 13 | Wages earned for fabrication | Nil value. | |
| 14 | Quality of cloth. | Poor. | |
| 15 | If bad selvedge give reason | Extensive breakage of threads. | |
| 16 | If defective cloth whether due uneven or faulty yarn, uneven packing, faulty workmanship breakage of warp threads or any other fault. | | |
| 17 | Misc. information | | |

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## TABLE III—(*contd.*)
## *DIRECTOR OF INDUSTRIES*
## P.E.P.S.U.
## MILL SPUN YARN EXPERIMENT NO. 3
## WEAVING ON FLY SHUTTLE LOOM WITH USUAL PREPARATORY PROCESSES

| S. No. | Name of Process or specification | Particulars | Remarks |
|---|---|---|---|
| 1 | Sizing | Preparing the warp for sizing 1½ hours. Sizing process 1 hour. | Weaver was assisted by another helper worker for all processes except weaving. The helper supplied to him the ready made weft pirns for weaving. |
| 2 | Winding warp | 5 hanks per hour. | |
| 3 | Warping | 1-3/4 hours | |
| 4 | Drawing and Beaming. | 7 hours | |
| 5 | Fitting up warp on loom | One hour. | |
| 6 | Length of warp. | 20 Yds. | |
| 7 | Width of warp cloth | 30". | |
| 8 | Count of warp yarn. | 14s. | |
| 9 | Count of weft yarn. | 14s. | |
| 10 | Reeds or No. of ends per inch. | 40s. | |
| 11 | Average No. of picks per inch. | 36/38. | One yard of cloth is sent herewith. |
| 12 | Production per 8 hours. | 14 yds. (About). | |
| 13 | Wages earned for fabrication | Rs. 2/3/- at -/2/6 per yd. | |
| 14 | Quality of cloth | Satisfactory. | |
| 15 | If bad selvedge give reason | No problem. | |
| 16 | If defective cloth, whether due to uneven or faulty yarn, uneven packing, faulty workmanship breakage of warp threads, or any other fault. | No comments. | |
| 17 | Misc. information | I. The worker was not a hereditary professional weaver but an ex-trainee of work centre.<br>II. In all weaving process took 12 hours to finish the work and cloth produced was 19½ yds. | |

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## TABLE IV

### Report of Shri S. R. Vasavada on weaving tests on Ambar Yarn

| Handloom Count 20's Width 45" | Length 12 yards<br>First piece | Ends per inch 45<br>Second piece |
|---|---|---|
| Warp hanks . . . . . | 33 | 33 |
| Weft hanks . . . . . | 36 | 34 |
| Time-warp preparing . . . . | 5 hours | 5 hours |
| Piecing time . . . . . | 5 hours | 4 hours |
| Beaming time . . . . . | 1 hour | ½ hour |
| Weaving time . . . . . | 13 hours | 10 hours |
| Average production per hour . . | 1 yard | 1½ yards |
| Ends breakages . . . . . | 40 | 28 |
| Ends per inch (Pick) . . . . | 48 | 45 |

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# TABLE V

## Productivity in Weaving—Frequency Distribution

### (All-India Khadi and Village Industries Board)

| | | Ambar Yarn | | | | | Mill Yarn | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Below 6 yds. | 6 to 7 yds. | 8 to 11 yds. | 12 yds. and above | Total | Below 6 yds. | 6 to 7 yds. | 8 to 11 yds. | 12 yds. and above | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | Andhra | .. | 1 | 2 | 1 | 4 | .. | .. | 1 | 2 | 3 |
| 2 | Karnatak | 2 | 2 | 1 | .. | 5 | .. | 2 | 2 | 1 | 5 |
| 3 | Maharashtra | .. | 4 | 3 | .. | 7 | .. | 1 | 6 | .. | 7 |
| 4 | Gujerat | .. | .. | .. | 1 | 1 | .. | .. | .. | 1 | 1 |
| 5 | Tamilnad | .. | 1 | 1 | 1 | 3 | .. | .. | .. | 2 | 2 |
| 6 | Bihar | 1 | 1 | 4 | 13 | 19 | .. | .. | 5 | 5 | 10 |
| 7 | Saurashtra | .. | 1 | 1 | .. | 2 | .. | .. | .. | .. | .. |
| | Total | 3 | 10 | 12 | 16 | 41 | .. | 3 | 14 | 11 | 28 |
| | Percentage to the respective totals | 7·3 | 24·4 | 29·3 | 39·0 | .. | .. | 10·7 | 50·0 | 39·3 | .. |

## III ECONOMIC ASPECTS

52. Before discussing the terms of reference bearing on the economic aspects of the Ambar charkha programme, it is considered necessary to describe, very briefly, the overall picture which the Committee envisages for the decentralised textile industry. The entire question is linked with the assumptions on which the Committee has acted and which have already been stated in the introductory chapter. The provision of a greater measure of employment through the decentralised economy and progress towards a socialist State is the objective which has been kept in mind. The Ambar project comprising both spinning and weaving should, in the view of this Committee, be so designed, organised and implemented as to be related directly to the development and transformation of the village economy. It is realised that decentralisation of the textile industry right into the villages, may involve a very considerable financial and administrative effort. But in the interest of a more equitable distribution of opportunities and incomes and to eliminate, as far as possible, social and economic inequalities, increased financial costs commensurate with the economic results obtained and increased organisational endeavour are considered well worth it.

53. At one stage, serious consideration was given to the alternative of imposing an additional cess on mill production for meeting the increased costs involved in production in the decentralised sector. But this idea was abandoned and the view that has ultimately prevailed is that whatever assistance is to be given should be done through subsidies, till such time as technological improvements in the small spinning units reach a level when subsidies can be altogether abolished. A measure which is likely to greatly contribute to the realisation of the objective of doing away with subsidies in decentralised production is the progressive realisation of regional self-sufficiency. If any area or region under-takes internal consumption of yarn and cloth produced on a decentralised basis, that region should be given preference.

54. It has already been stated earlier that the Ambar charkha is only at the beginning of its evolution as a model, although even behind the present standard model of the Ambar charkha a great deal of technical research has gone in. The Committee had an opportunity of seeing a few other hand-spinning units also. But of those seen the Ambar charkha seems the best. The Ambar charkha no doubt, seems to have immense possibilities in enabling the decentralisation of an industry, producing a commodity, essential next only to food; and in providing greater gainful employment, particularly in the villages. But it has to be stated that while there is justification for a balanced optimism, there is also need for cautious advance and most careful organisation, in every direction. In fact, until further field experiments are carried out on an intensive scale, it

is not possible to arrive at ultimate conclusions. As will be observed from the next chapter, only an interim programme is being proposed for the present.

55. In order to investigate the economic aspects of the Ambar Charkha programme, the Committee drew up a questionnaire and issued it to a large number of parties, in the hope that as representative a volume of opinion and comments, as possible, might be obtained. The Directors of Industries in the 28 States of the country were addressed in addition to a few leading economists and Schools of Economics. The 6 Textile Institutes and the All India Khadi and village Industries Board under whose auspices the Ambar charkha tests had been conducted, were also requested to send replies to the questionnaire. Unfortunately, the response was not as good as was hoped, mainly for the reason that many of the addressees had not specifically investigated the various economic implications of the Ambar programme.

### Subsidy for the Production & Distribution of Ambar Charkhas

56. The Ambar Charkha unit is composed of 3 parts—the spinning frame with 4 spindles; the *belni* or the sliver-making machine and the *dhunai modia* or the carding machine. On the basis of experience in the manufacture of 6,000 Ambar charkhas under the Board's pilot project, the cost of the spinning-frame and the *belni* comes to approximately 70 to 75 rupees. The *dhunai modia* is priced at Rs. 15 and rupees 5 to 7 is the cost of the carding bow. The cost of the tool-box is in addition. During the course of working with the Ambar Charkha, some spinners have combined the *dhunai modia* and the *belni* by adding an attachment to the *belni* itself. For such persons the entire equipment excluding the *dhunai modia* but including the tool-box will cost Rs. 75. If the *dhunai modia* is also used as a separate machine, the cost will average between Rs. 95 and Rs. 105. These calculations pertain to the standard Ambar charkha. As had already been mentioned earlier, the Ahmedabad Textile Industries Research Association have introduced certain improvements in the standard model. If the calender roller added by them is taken into account, an extra Rs. 12 will be necessary, bringing the total cost of the unit to Rs. 117. Since it is not absolutely essential that the *dhunai modia* and the calender roller be used by every spinner, a range of Rs. 75 to Rs. 125 has been adopted, giving an average of Rs. 100 per unit. This is the cost at the manufacturing point. Since, this includes over-heads at Rs. 8 to Rs. 10 per charkha unit and since there is no profit element involved, the selling price will be indentical. At present, *i.e.* for the charkhas required under the pilot project, the production was arranged at 17 centres. The question was considered whether it would be possible to reduce the cost of production when for a bigger programme a much larger number of charkhas would be required and if centralised production was resorted to. But the committee is extremely anxious that for the reason already mentioned, the manufacture of Ambar charkhas, barring the iron and steel precision parts, should be undertaken on a completely decentralised basis.

57. The life of the Ambar charkha, excluding the precision parts, has been taken as 10 to 15 years. Out of the wooden structure the parts that will wear out and need replacement are the bearings and wheels. On an average, these will require to be replaced once in six

months and the total replacement cost per year for both the bearings and the wheels is estimated at Rs. 10 on the out-side. Taking the life of the charkha at the minimum of 10 years, the replacement cost works out to 10 per cent. and the depreciation period, 10 years.

58. The question now arises as to what, if any, should be the subsidy on the supply of Ambar charkha unit, costing Rs. 100 on an average, the depreciation period for which is 10 years and the replacement expenditure for which is 10 per cent. From among the 35 parties to whom the economic questionnaire was addressed, only 2 have given any suggestions in regard to this matter. One has recommended that 50 per cent. of the cost should be subsidised by Government. The other advises that 75 per cent. of the cost should be given as an out-right grant to the unemployed and underemployed and the remaining 25 per cent. should be realised on the hire-purchase basis. The Committee itself considers that any financial assistance which is given in this context should be linked with the output. The view was put forward that in consideration of the poverty of the peasants, some cash subsidy appeared inescapable. The hire-purchase system, it is argued, would mean realising the cost of the charkha out of the spinners earnings. Even if the repayment period is fixed at 5 years, the spinner would have to part with about Rs. 20 per year, from his earnings besides paying for essential replacements. Another proposal that was considered was the giving of an out-right subsidy only to *Harijans* and others in indigent circumstances. It was, however, felt that this would lead to avoidable discrimination and would be psychologically undesirable. But the Committee feels that one safe-guard must be provided. Out-right subsidy may be given in specially deserving cases but before doing so it must be ensured that proper use has been made of the charkha. The subsidy, if any, should be paid only after adequate production has been established. The Committee's unanimous view is that, in the first instance, the Ambar charkha set should be charged at full cost to the spinner to whom it is supplied. The cost should be recovered from him in easy instalments over 5 years, free of interest. It should be open to the appropriate agency authorised by Government, when approximately half of the cost has been recovered, to decide in the case of a particular person or class of persons as to whether any part of the remaining half of the cost should be treated as subsidy. One of the main criteria in deciding upon subsidy should be the use made of the Ambar charkha. If the level of production is such as to prove satisfactorily that good use has been made of the Ambar charkha, then as a bonus, the spinner may be exempted from repaying the balance of Rs. 50. By the time the situation is ripe for taking a decision on whether such exemption should be granted, the spinner would have been tested for atleast 2½ years. This period is considered sufficient for objectively testing whether the spinner has used the Ambar charkha well or not. Until the time that a decision is made by the competent authority to grant exemption, the Ambar charkha should remain the property of the centre or other agency, whether it is a State Government, or the Khadi Board or a co-operative, until the last instalment is paid on the hire purchase system.

## Working Capital required for the manufacture of Ambar charkhas

59. From the recommendation made in the previous section, it is obvious that initially, expenditure involved in the manufacture of

Ambar charkhas will have to be borne by Government. It is, therefore, necessary to provide some working capital for this purpose. The purchase price of the charkhas will be realised in easy instalments to be spread over a period of five years. In certain cases, a portion of the purchase price will have to be remitted. Since there will be no profit element in the manufacture and supply of Ambar charkhas, it would, in effect, mean that capital for the manufacture of Ambar charkhas will be depleted and will not be recouped in full from sales. This points to the necessity of providing adequate capital if the manufacturing programme is to be carried on without interruption. It is estimated that working capital required for the manufacture and supply of Ambar charkhas. at the rate of approximately 50 per cent. of the cost of the charkha sets to be made and supplied in any one year should be provided. In effect, it means that an amount equal to 6 months' production should be provided as working capital in any one year of the programme. It is also recommended that loans for working capital should be given free of interest. It is realised that exemption of such loans from interest charges will mean an additional indirect subsidy. It is recommended that the amount involved should be treated by Government as an additional subsidy but should not be taken into consideration when calculating the cost of production of yarn.

### Wages of Spinners operating the Ambar charkhas

60. One of the most important elements in working out the cost of production of yarn is the wage bill. Before, therefore, the cost of production of yarn is considered, it is necessary to determine the wage factor. It is considered that it would be appropriate to fix the spinners' wage in the background of prevailing rates for agricultural labour. While in Malabar, Kerala and Madras the rate is between nine annas and twelve annas, in other States such as Madhya Pradesh, U.P. and Punjab it is higher. Under existing conditions, and as an interim measure, an average of 12 annas per day is considered not unreasonable if and when a production rate of 8 hanks per day is obtained. From the long-term point of view, this is really insufficient and the scheme must aim at a progressively higher wage level for the spinners. An eminent economist Professor D. R. Gadgil to whom the questionnaire had been addressed has cautioned the Committee that unless the spinners get an adequate wage the scheme would not be worthwhile. But the question has to be viewed in the background of prevailing circumstances of large scale unemployment and underemployment. There is a body of opinion which constantly emphasises that low wage earning occupations should not be encouraged. In the absolute sense, of course, the contention is indisputable. But this question cannot be dissociated from the prevailing level of earnings. The situation will have to be watched closely and every aspect of the matter examined, to assess whether any revision of the rates is warranted. There is another side to this problem. Even in places where the agricultural rate is higher, ranging between Rs. 1-4 and Rs. 1-8, the agriculturist earns this amount for a maximum period of say 200 days in the year. On the other hand, the Ambar programme envisages continuous work for the full year *i.e.* for 300 days. The lower wage of 12 annas per day, since it promises steady and continuous work throughout the year has an attraction of its own and may even be preferred to the higher rate of Rs. 1-4 or Rs. 1-8 for only about half the year.

61. Another question that requires examination is whether the wage for the spinner of Ambar yarn should be made uniform throughout the country or should it vary from State to State, depending upon the agricultural wage-level prevailing there. Today, despite the regional differences that exist, the All India Khadi and Village Industries Board, following the example of the All India Spinners' Association, is giving a uniform rate to spinners throughout the country. It is considered that the same practice may be continued for the present. If disparities increase, varied rates may become necessary later on. But as has already been stated before, the wage structure should be kept under constant watch and studied by Government. Adjustments should be made as and when necessary.

62. It is also considered that the wage should be given as a piece-rate and it is recommended that for every hank of yarn spun, a piece rate remuneration of As. 1½ should be given. There is, however, one drawback. Since spinning of lower counts will result in higher output, in terms of hanks, the piece-rate system might act as an incentive to the production of coarser yarn. There is yet another aspect of this problem. With greater technological improvements in the Ambar charkhas and with greater practice, it will no doubt be possible, in the not too-distant future, for the spinner to produce even 12 or more hanks per 8 hours day. On the piece-rate basis, the daily wage would increase. This again emphasises the need for continuous study and review. Taking everything into consideration, the Committee is of the view that a flat piece-rate of 1½ annas a hank for all counts, for the present, would be reasonable, based on spinning counts, for 16's to 32's. Since there is a possibility that this may encourage spinners to prefer lower counts below 16's, down even to 12's, it will be necessary to watch the situation closely and to revise the rate for the lower counts if such a trend is found. Similarly, the situation will have to be watched closely, if there is a trend towards finer counts. In any case, it will be necessary to watch closely the working of the piece-rate, as a whole, and review it further periodically.

## Cost of Production of Yarn

63. In calculating the cost of production of yarn, several elements have to be taken into consideration. These are maintenance and depreciation of the equipment, training, interest charges on working capital, handling charges, cost of raw cotton, wastage, wages etc.

### (a) *Maintenance and depreciation*

As has already been stated in a previous section, the cost of maintenance is estimated at Rs. 10 a year. Since the depreciation period has been worked out to be 10 years, the annual depreciation will be 10 per cent. of the cost of the Ambar charkha or Rs. 10. At the rate of production of 6 hanks of 18's per spinner, per day, the annual output for one spinner is estimated at 100 lbs. in a year of 300 days. Since two spinners will be operating each Ambar charkha unit, the total output on each charkha is estimated at 200 lbs. in the year. Taking 18's as the average count that will be produced on the Ambar charkha, the number of hanks that would be annually produced on each charkha unit will be about 3,600. The maintenance and depreciation cost of Rs. 20 per year will have to be spread out, therefore, on these 3,600 hanks, which works out 0·1 anna per hank. The Committee's view is that the amount is so insignificant that it need not be taken into consideration in calculating the built-up cost of yarn.

### (b) *Training*

The Committee is of the view that training cost should be looked upon as general development expenditure and should not, therefore, be included in working out the built-up cost of yarn.

### (c) *Interest charges on working capital*

The view is that like training, interest charges on working capital should be regarded as an indirect subsidy and should not be reflected in the cost of the production of yarn.

### (d) *Handling charges*

Generally speaking, due to the fact that production is envisaged on a decentralised basis, the expenditure on stocking, insurance and overheads will be considerably reduced. However, practical experience has shown that even where cotton is available locally, dealers raise prices to an inordinate degree in times of scarcity. In order to avoid such a situation, it has been the practice to keep roughly 50 per cent. of the cotton required stocked in godowns. In times of scarcity and rise in prices raw cotton is supplied from the central godowns to spinners. This helps in bringing down the market prices. On the whole, it is estimated that handling charges which include organisation, distribution and collection, work out to between 2-3 annas in the rupee, from cotton to cloth. For spinning alone, handling charges would come to roughly 1 anna in the rupee or 6¼ per cent.

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### (e) *Cost of raw cotton*

For yarn of 18's, the price of raw cotton has been calculated at Rs. 700 per candy on an average for the *jarilla* variety. This covers elements like market fluctuations. Sometimes, the price is a little more than Rs. 700, at others it is a little less. But on an average, Rs. 700 per candy for 18's is considered adequate. For other counts, the price of raw cotton will naturally have to be adjusted.

### (f) *Wastage*

It has already been stated in an earlier section that the majority view is that wastage may be calculated at 12½ per cent.; but in calculating the cost of raw material the total value should be taken, inclusive of wastage. Instead of, for example, taking Re. 0-14-2 as cost of cotton plus Re. 0-1-9 as wastage, it is necessary to take into consideration the cost of that amount of raw cotton which after allowing for a wastage of 12½ per cent. will yield 1 lb. of cotton. Provision for wastage, therefore, will increase slightly.

### (g) *Wages*

This should be calculated on the piece-rate basis namely Re. 0-1-6 per hank.

The price of 1 lb. of yarn of 18's will thus be composed of the following items:—

| | Rs. | A. | P. |
|---|---|---|---|
| (*i*) Raw Cotton . . . . . . . . . | 0 | 14 | 2 |
| (*ii*) Wastage (including additional cotton required.) . . | 0 | 2 | 2 |
| (*iii*) Spinning wages . . . . . . . . | 1 | 11 | 0 |
| (*iv*) Handling charges . . . . . . . . | 0 | 2 | 8 |
| Total . . | 2 | 14 | 0 |

For other counts of yarn, depending upon cotton used, the cost of production of yarn per pound will need proportionate adjustment.

**Difference in the cost of supplying yarn to handloom weavers as between yarn manufactured by the Ambar charkha and yarn reeled by the Mills.**

64. A handloom weaver who is a member of a co-operative society gets his yarn of 18's delivered to him at Rs. 1-9-6 plus 6¼ per cent. as middle charges. According to the information available to the Committee, a weaver who does not belong to a co-operative society can purchase similar count of yarn at Rs. 1-9-6 plus anything from 6¼ per cent. to 12½ per cent. Since the amount of Rs. 2-14-0 is the wholesale cost of Ambar yarn of 18's, middleman's charges will be about the same as in case of mill yarn. In effect, therefore, the difference per pound of mill and Ambar yarn will be Rs. 1-4-6.

**Subsidy**

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65. The precise reference to the Committee in regard to this matter is, what will be the subsidy required for the production and distribution of yarn. The main purpose behind any subsidy is to equalise the price of the handmade product with mill-made product by making the former competitive and worthwhile for the consumer to purchase. In the present context, whether the subsidy is given at the yarn point or cloth point, one difficult hurdle has to be overcome. The main objective in effecting technological improvements in the equipment and the processes which go into the manufacture of the cloth is to improve its quality to a degree that will reduce the difference between Ambar cloth and mill cloth to a minimum. The more the texture and the cloth improve, the more difficult it will become to distinguish between Ambar yarn and mill yarn or Ambar cloth and mill cloth. The subsidy is to be given on the Ambar product, whether yarn or cloth. It is essential that care is taken to prevent abuse of the subsidy by mixing the cheaper mill yarn with Ambar yarn and passing it off for the product which can claim the rebate. It appears that a large inspectorate and other organisational arrangements would be necessary for preventing the abuse. At one stage, largely to reduce the organisational difficulties, the Committee gave serious consideration to the levying of a

cess on mill yarn or cloth. Since the ultimate object is to equalise the price difference between the cottage and the mill product, it was considered that the levy of a cess was as good a means as any. There would also be an additional advantage in doing away with an expensive and complicated organisation. A cess would incidentally have also done away with the need for what has been known as "certification" in the field of khadi. It is the Committee's hope that Ambar cloth would ultimately take a natural and not a special place amongst the various kinds of cloth to be bought or sold and that ultimately there should be no "certification" necessary for keeping Ambar cloth "pure". But in the absence of a cess and due to the necessity of differentiating between Ambar and cloth woven from mill yarn for the purpose of subsidy, certification in some form may be necessary for some time. The idea of a cess was not favoured because in the first place it was feared that the price of an essential commodity like cloth would shoot up even higher and hit the consumer. Apart from the fact that the imposition of a cess would mean higher cost to the consumer, it would not even imply that Ambar yarn and Ambar cloth were necessarily being helped. The salability of Ambar yarn or cloth would depend upon the free-play of larger market forces and the spinner and weaver would be left to their own devices in counter-acting the play of these market forces. Under the circumstances, it would be difficult for him to establish himself within a free market. In short, the Committee, in the general intention of equalising market price of Ambar cloth, considered the possibility of providing such equalisation by imposing a cess on mill yarn and possibly also on mill cloth but is finally of the view that cess must be ruled out and that the better alternative would be a subsidy along with an adequate organisation for its distribution.

66. The Committee also recommends that in order to somewhat minimise the organizational problems, the subsidy should be on a single point; that it should not be paid at all until yarn has been suitably accepted, woven into cloth and sold. There are other advantages also. Since the subsidy will be at the sale-point, it will automatically tend to rationalise, not only the quality of the yarn but also the quantity that is produced. The touch-stone of salability and acceptability of the product in the market must inevitably have a healthy influence on the project as a whole. In fact, the scheme should be so organised as to ensure that yarn produced does not accumulate for want of weaving. The rationalisation of production in relation to demand will involve constant testing of the market and a very close study thereof, both from the view point of cloth and the price at which it will find a ready market. The Committee, therefore, considers that market analysis and testing is concomitant for the success of the scheme.

67. In consideration of the advantages described, the Committee is unanimously of the view that there should be a one-point subsidy and that it should be paid at retail-sale point. Since part of the Ambar cloth that will be produced will be for self-sufficiency, the Committee further recommends that on the portion of cloth prepared for self-sufficiency, the subsidy should be paid at the production point i.e., at the weaving stage. It is estimated that about

25 per cent. of the total production of Ambar cloth will be absorbed in the self-sufficiency scheme. It has already been recommended earlier that any Ambar project should be incorporated with the progressive realisation of regional self-sufficiency and should provide for the increase in consumption of Ambar cloth in local areas. This will not only strengthen the whole village economy but will greatly contribute to the realisation of the ultimate objective of doing away with subsidy altogether in the context of cloth production. If an area or region undertakes any internal consumption, it has to be repeated, such an area must be given preference for the location of the Ambar programme.

68. The last but not the least important question that has to be settled in this connection is the actual quantum of subsidy. In the first instance, the target must be equalisation of the prices of Ambar cloth and handloom cloth manufactured with mill yarn. In order to determine the difference between the two types of cloth, a few members of the Committee undertook to work out the costing. For Ambar cloth woven with yarn of 18 counts, the construction of which is 42 ends and 42 picks, having a width of 45″ and using Ambar yarn costing Rs. 2-14-0 per lb., the total cost comes to Rs. 1-4-1·7 per yard. This includes miscellaneous expenses like overheads, agency commission etc. but excludes rebate or subsidy. Handloom cloth of similar specifications, made with mill yarn priced at Re. 1-9-6 per lb., and adding thereto 6¼ per cent. for handling charges, costs Re. 0-13-2 per yard without rebate. The average handloom rebate is 1½ annas in the rupee while that proposed by the All-India Khadi and Village Industries Board for Ambar cloth is 4 annas in the rupee. Taking into account the rebate element, the net cost of Ambar cloth will be Re. 0-15-2 per yard and the net cost of similar handloom cloth will be Re. 0-12-2 per yard. Four members are of the view that a subsidy of four annas in the rupee, for the present, at cloth point should be adequate to enable the Ambar cloth to be marketed to the extent of 75 per cent. of the cloth produced. Three members are of the view that a slightly higher subsidy, approximately 5 annas in the rupee may become necessary to enable the marketing of 75 per cent. of Ambar cloth produced. Four members are of the view that a subsidy of at least 6 annas in the rupee will be necessary for the purpose and three of them are further of the view that even so, it is doubtful whether all the cloth produced can be marketed.

69. In conclusion, therefore, it is recommended that a single point subsidy at the cloth stage, of a minimum of 4 annas in the rupee should be given; on about 75 per cent. of the cloth produced, it should be given on the retail-sale point and on about 25 per cent. of the cloth produced for self-sufficiency, the subsidy should be given at the production stage.

70. Special and continued effort should be directed, however, at every point towards a target in the first instance of bringing down the need for subsidy to a total of two annas in the rupee for Ambar cloth exclusive only of the cost of training, subsidised cost of the Ambar units and interest on working capital advanced to co-operatives etc. The subsidy now recommended is only a short-term measure, pending further technological and other improvements in

the Ambar charkha. The ultimate objective must be of attaining the point where a subsidy will no longer be necessary for decentralised spinning and weaving.

**Working capital requirements for the production of Ambar cloth.**

71. It is evident that for the production and sale of Ambar cloth, a fairly large amount of working capital will be required. The loan requirements for the manufacture of Ambar charkha have already been set down earlier. Excluding this and also the funds required for seasonal stocking of cotton, the estimate is that roughly 60 per cent. of the turn-over should be provided for the purpose. A somewhat lower percentage was at first considered. On the other hand, the fact remains that the production of Ambar cloth is a new venture and the market has not yet been tested adequately. A margin has, therefore, to be allowed for temporary hold-up of stocks. Apart from this, in the beginning, until the new product catches the public eye, the clientele would be of a specialised and somewhat restricted nature. There is still another consideration. Unlike factory production which is even and continuous no matter what the season, cottage production is very much influenced by the requirements of agriculture. So long as the cultivating season is not on, work relating to the production of cloth progresses well. But as soon as the fields require his attention, the spinner and the weaver in the rural areas naturally slow down their subsidiary activity and give the first priority to cultivation. During this period although yarn is not immediately required in bulk, it is to be stored to meet the greater demand of the off-season.

72. Later, it may be possible to reduce the provision for working capital but for the present 60 per cent. of the actual turn-over is considered reasonable. No accurate study of the requirements has yet been made. Experience of the working of the scheme and market reaction to the end-product over a length of time will determine whether any modification is necessary. Working capital of 60 per cent. as proposed does not compare unfavourably with the existing provision for the handloom industry. The Handloom Board provides working capital per loom, at the rate of Rs. 200 but the State Governments have been permitted within the over-all limit to provide Rs. 300 per loom in certain special cases. This figure excludes the requirements of production of yarn. While in the handloom industry, the starting point is the purchase of yarn, in the Ambar programme, the starting point is the purchase of cotton. All the stages from cotton to cloth are, therefore, covered. The Handloom Board also provides working capital to the apex weavers' co-operative societies for marketing. In the case of Madras and Andhra where the largest amounts have been given for the purpose, the amount available per loom in the co-operative sector works out to Rs. 27 and Rs. 22 respectively. In the Ambar charkha programme also, if the working capital at 60 per cent. is converted in terms of money it comes to about Rs. 500 per Ambar Charkha set, employing two persons and combined with the handloom for weaving. On the basis of 6 hanks per spinner per day in a year of 300 days, the total output of yarn would come to about 200 lbs of 18's. At the rate of

3·6 yards of cloth per pound, the total output of cloth would be 720 yards, the approximate value of which would be about Rs. 900. Sixty per cent. of Rs. 900 is Rs. 540. Keeping a margin for the fact that the Ambar charkha combined with the handloom will not be operated full time for all the 300 days, a round figure of Rs. 500 is proposed. The recommendation, therefore, is that working capital from cotton to cloth, in the case of the Ambar scheme and including working capital required for the handloom involved should be provided at the rate of approximately Rs. 500 per Ambar charkha set, employing two persons and combined with the handloom; but excluding the working capital required for stocking cotton seasonally and including the working capital required for marketing the cloth.

73. As in the case of working capital for the manufacture of Ambar charkha, so also for the working capital to be given for the production of Ambar cloth, it is recommended the loans should be advanced free of interest by Government. The indirect subsidy involved should not be included in the cost of production.

### Cost of the Programme

74. In Chapter IV the Committee's specific proposals in regard to the Ambar charkha programme have been set down. Although 75,000 Ambar charkhas are being proposed to be installed in 1956-57, it will not be possible for all of them to go into production. A sufficient number will have to be reserved for training institutions like *Vidyalayas* and *Parishramalayas*, where instructors and spinners will be trained. The number required for these training institutions will have to be purchased outright and supplied to them as part of the training equipment. Only the balance Ambar charkhas can be taken into consideration for calculating expenditure on distribution of Ambar charkhas to the spinners, the working capital required for their manufacture and the actual production of cloth on which subsidy will have to be given. Since a quarter of the current financial year has already gone by and it may take some further time before the required number of spinners are trained and the required number of Ambar charkhas are manufactured and an adequate organisation brought into existence, it may not be possible for all the Ambar charkhas excluding those required for the training institutions to work to full capacity. In working out the cost, however, account is being taken of the full expenditure on a programme for establishing 75,000 Ambar charkhas. Depending upon the rate at which organisational and training arrangements are completed, a part of the total amount may actually be spent in 1957-58.

75. For operating 75,000 Ambar charkhas at 2 workers per unit, 1·5 lakh trained spinners will be required. At the rate of 100 trainees for a three-month course, the annual capacity of each *Parishramalaya* will be 400 trainees. Therefore, for 1·5 lakh trainees 375 *Parishramalayas* will be necessary. It has been stated earlier in this report that 1 instructor is expected to train 50 spinners. For each three-month course to which 100 trainees will be admitted, two instructors will be required. Since 4 courses in each *Parishramalaya* will follow each other and not be run simultaneously, two instructors per *parishramalya* should suffice. In 375 *Parishramalayas*, 750 instructors would be required. In connection with the

Ambar charkha pilot project, the All India Khadi and Village Industries Board established some *Viayalayas and Parisramalayas.* In the latter, 2 courses of 6 months each were run and 50 workers were admitted to each course. One *Vidyalaya* has, therefore, an annual capacity for training 100 instructors. For 750 instructors, 8 *Vidyalayas* are required. Thus, under the training programme, 375 *Parishramalayas* and 8 *Vidyalayas* have to be established.

76. In calculating expenditure that will have to be incurred for establishing *Parishramalayas* and *Vidyalayas,* advantage has been taken of the financial pattern that Government have already approved for these institutions under the Ambar charkha pilot project. Only one modification has been introduced. According to this Committee's findings, 1 instructor should be able to train 50 spinners. Provision is, therefore, suggested for only 2 instructors for each *Parishramalaya.* On this basis, each *Parishramalaya* will cost Rs. 12,000 towards recurring expenditure and Rs. 750 towards non-recurring expenditure, or a total of Rs. 12,750. Expenditure on 375 *Parishramalayas* will be Rs. 47,81,250. In addition, stipends for 1·5 lakh trainees at Rs. 30 per person will come to Rs. 45 lakhs. Total cost of running 375 *Parishramalayas* will be Rs. 92,81,250. The cost of establishing 1 vidyalaya according to the financial formula already approved is Rs. 72,380 inclusive of stipends for both instructors and carpenters. The cost, therefore, of establishing 8 *Vidyalayas* will be Rs. 5,79,040/-.

77. For 375 *Parishramalayas* and 8 *Vidyalayas,* about 19,000 Ambar charkhas will be necessary. This figure is based on the following calculation: for 100 spinners to be admitted in each three-month course, 50 Ambar charkhas at 2 men per Ambar charkha should be sufficient. Since these courses will not run concurrently, 50 Ambar charkhas for all the 4 courses in the year will be enough. In 375 *Parishramalayas,* 18,750 Ambar charkhas will be required as part of the training equipment. In each *Vidyalaya,* 50 instructors are to be admitted for each six-month course. At the rate of 1 charkha for 2 instructors 25 Ambar charkhas will be required per *Vidyalaya* or 200 for 8 *Vidyalayas.* The total number of Ambar charkhas that will be necessary as teaching aids, therefore, comes to 18,950 or say 19,000. At the rate of an average of Rs. 100 per charkha, the cost of supplying 19,000 Ambar Charkhas will be Rs. 19 lakhs.

78. After taking into account 19,000 Ambar charkhas for the training institutions, 56,000 charkhas will be available for production proper. The figures that follow are based on the conclusions set forth in the previous sections. The cost of distribution of 56,000 Ambar charkhas will be Rs. 56 lakhs, half of which will be given as loan and the balance may have to be given as grant if the conditions mentioned in paragraph 58 are fulfilled. For the purpose of budgeting, it may be well to provide half the amount as subsidy. Working capital for the manufacture of 56,000 Ambar charkhas at 50 per cent. of the cost of production is Rs. 28 lakhs.

79. The annual production including production by *Vastraswavalambis* from 56,000 Ambar charkhas at 200 lbs. of yarn of 18 counts per unit, operated by two spinners, would be 1,12,00,000 lbs. At an average of 3·6 yards per pound 4,03,20,000 yards of Ambar cloth

will be produced over a twelve month period. At Rs. 1-4-0 (round) per yard, the money value of the cloth will be Rs. 504 lakhs. At the rate of 4 annas in the rupee, subsidy on cloth will amount to Rs. 126 lakhs.

80. Working capital for production and marketing of cloth at 60 per cent. of production will come to Rs. 3,02,40,000. Since this does not include working capital for purchase of cotton, a separate amount will have to be provided as working capital for buying cotton. It is considered that 20 per cent. of the production valued at Rs. 504 lakhs should suffice. This percentage is the same as has already been accepted for calculating the working capital required for purchasing cotton for the manufacture of traditional khadi. At 20 per cent., therefore, the working capital required for the present scheme will be Rs. 1,00,80,000.

81. For workshops and finishing centres, Rs. 17·4 lakhs and Rs. 16·12 lakhs respectively may be provided. For organisation, a sum of Rs. 12 lakhs would be required. These figures are based on certain calculations that have been worked out by the Khadi Board in connection with their own Ambar charkha programme.

82. In brief, the total cost of the 75,000 Ambar charkha programme will be as under:—

| Item | Grant | Loan |
|---|---|---|
| | Rs. | Rs. |
| 1. Establishment of *Parishramalayas* . . . . . | 92,81,250 | .. |
| 2. Establishment of *Vidyalayas* . . . . . | 5,79,040 | .. |
| 3. Supply of 19,000 Ambar charkhas for training institutions . . . . . . . . . . | 19,00,000 | .. |
| 4. Distribution of 56,000 Ambar charkhas for production proper. . . . . . . . | 28,00,000 | 28,00,000 |
| 5. Working capital for manufacture of 56,000 Ambar charkhas . . . . . . . . | .. | 28,00,000 |
| 6. Subsidy on cloth at As. -/4/- in the rupee. . . | 1,26,00,000 | .. |
| 7. Working capital for production and marketing of cloth. . . . . . . . . . . | .. | 3,02,40,000 |
| 8. Working capital for purchase of cotton . . . | .. | 1,00,80,000 |
| 9. Finishing centres . . . . . . . | 6,12,000 | .. |
| 10. Workshops . . . . . | 17,40,000 | .. |
| 11. Organisation . . . . . . . | 12,00,000 | .. |
| TOTAL . . . . . | 3,07,12,290 | 4,59,20,000 |

सत्यमेव जयते

83. As explained earlier, the above-mentioned amounts represent the full cost of a programme involving the installation of 75,000 Ambar charkhas. The actual cost to Government in the current financial year will be much less. While the full amount, it is hoped, will be spent on the establishment of *Parishramalayas* and *Vidyalayas*, including cost of supplying 19,000 Ambar charkhas as training equipment and on the manufacture and distribution of the balance of 56,000 Ambar charkhas, expenditure on subsidy will be considerably reduced during 1956-57. Only after the training and organisational arrangements have been completed, will actual production commence. It is anticipated that a good 50 per cent. of the amount of Rs. 1·26 crores shown against subsidy on cloth will have to be paid during 1957-58. Working capital requirements for production and marketing of cloth and for purchase of cotton will be correspondingly reduced.

84. For finishing centres, workshops and organisation, the full amounts indicated in the summary of financial costs will have to be paid out in the current financial year.

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## IV. THE PROPOSAL: PROGRAMME AND ORGANISATION

81. It has already been emphasised during the course of examination of the technical potentialities of the Ambar charkha and the economic implications of any programme based thereon, in chapters II and III, that although the Ambar charkha undoubtedly seems to have great possibilities for bringing about the decentralisation of the textile industry and that there is scope for a balanced optimism, an equal emphasis has been placed on the fact that there is need for cautious advance. By and large, there has not been sufficient experience gained and sufficient data collected to draw ultimate conclusions on which heavy commitments could be based. Laboratory and field experiments must continue on an extensive scale before the final picture for the implementation of the project under the Second Plan can emerge. It is, therefore, considered desirable to set down definite recommendations for only the first year of the Plan. In making any specific proposal in regard to the number of Ambar charkhas that may be introduced in 1956-57, three aspects have to be examined. The over-all competence of the organisation, both in the field and at head-quarters, the capacity to manufacture the Ambar charkhas and its ability to make available a sufficient number of trained spinners to ply the number of charkhas manufactured.

86. According to information given by the Secretary of the Ambar Samiti under the Sarva Seva Sangh (also a member of the Committee), there is a capacity for the manufacture of 10,000 precision parts, per month, by the centres and organisations working for the Sangh. Due, however, to the prevailing uncertainty about the ultimate fate of the Ambar programme, the directive given by the Sangh restricted the production to 3,000 parts per month. Even so, the Sangh has about 12,000 parts already in stock and as soon as a final decision is reached they will be in a position to go ahead with their production programme and expect to reach an out-put of 10,000 parts per month after a period of three or four months. The Committee also understands that negotiations are being conducted with some ordnance factories for the manufacture of precision parts in bulk. As for the non-precision parts of the Ambar charkha, a recommendation has already been made that these should be manufactured on a decentralised basis by village carpenters and village black-smiths.

87. There is no doubt that for this work, a great deal of initiative and organization is necessary on the part of the authorities dealing with the programme. In addition to the Central and State authorities including Governmental authorities as well as the Khadi Board, the Sarva Seva Sangh and others, it is recommended that the programme should be integrated with the Community Project Areas and the National Extension Service run by the C.P.A. wherever a C.P.A or an N.E.S Project is sufficiently established. This will enable the organisors to draw upon the experience and resources of an organisation which has already been established in a large measure and which is expected to cover the entire face of the country in the near

future. The organisation aspect cannot be over emphasised. The Committee is of the view that organisation might very well prove the weakest link, if the greatest possible attention is not given to this aspect. In decentralised production, where the production units are necessarily scattered, where cotton has to be supplied to a large number of cottages all over the country, where yarn and cloth have to be collected from innumerable village homes for supply to marketing depots, organisation and administration must play an even more important role than in the established sector of the industry. Every unit of the set-up as a whole must be so geared as to make for smooth and efficient implementation of the programme. Unless really adequate arrangements are made in the organisation, administration and accounting to cover the whole programme both at headquarters and in the very wide territorial field to be covered by the Ambar charkha programme, there would be grave risk of heavy losses and the success of the programme will be jeopardised.

88. In regard to the availability of trained hands, according to information given by the Secretary of the Ambar Samiti, the present position is that 400 instructors have already been trained in the 15 *vidyalayas* sanctioned under the pilot project. In addition to these, the Sarva Seva Sangh has another 300 trained workers. Apart from these 700, another three to four hundred instructors are at the moment under-going training in the Board's *vidyalayas*. By July or August, it is estimated that 1,000 trained instructors will be ready for being drafted. It is considered that each instructor will be able to supervise 100 and train 50 spinners. A little after the middle of the year, therefore, 50,000 spinners should be ready to start work, in addition to about 4,000 spinners trained under the Board's pilot project.

89. While still on the subject of training, the Committee would like to stress that special attention should be given to training of both spinners and instructors. Training should be regular, systematic and sufficient. It is considered that training in the use, handling and maintenance of the Ambar charkha set, combined with practice, is essential for a minimum period of 3 months, in order that the spinner might attain adequate competence in production. The Khadi Board's field experiments under their pilot project have amply proved that there is a very intimate correlation between training and practice on the one hand and productivity on the other. After the minimum period of 3 months' training and practice, steady practice will significantly improve both quality and productivity. Unlike production in factories, with the Ambar charkha, the worker's skill increase curve will continue to rise for a much longer time. It is, therefore, recommended that at the end of the 3 months' training period, every spinner should be provided with an Ambar charkha set in his home for immediate use, without break. In fact, one of the conditions for receiving an Ambar charkha on the hire-purchase system should be a certificate of proficiency which may be awarded at the end of a successful completion of the training period. If a trainee is unable to attain the minimum speed and efficiency during the prescribed period, he should be required to undergo further training, until he is good enough to merit a proficiency certificate. But the minimum speed and efficiency should be strictly adhered to in order to ensure that the spinner will make proper use of the Ambar charkha that may be supplied to him on the hire-purchase system.

90. It has already been indicated in an earlier chapter that the cost of training should be regarded as development expenditure and not be reflected in the built-up cost of yarn or cloth. It is, therefore, recommended that the full cost of training should be met by Government. Both Government and the agencies and organisations responsible for the implementation of the Ambar programme must ensure that the training scheme keeps pace with the plan for production.

91. Subsequent to the completion of the first pilot project, Government have sanctioned, in connection with the installation of an additional 10,000 Ambar charkhas, 100 new *Parishramalayas* in addition to the continuance of 15 *Vidyalayas* and 100 *Parishramalayas* established under the first pilot project. It appears, therefore, that there should be a continuous supply of a large number of trained instructors and spinners, after each successive training course, for working the 1956-57 programme, as envisaged by this Committee, after the requisite number of additional *Parishramalayas* and *Vidyalayas* have been established for the increased number of Ambar charkhas.

92. The Committee considers that as part of the first phase of the programme the traditional charkha should be progressively replaced by the Ambar charkha. Existing Khadi looms should all go over to Ambar yarn. There are of course, a few persons who may like to continue to spin on the traditional charkha, as a matter of faith or in adherence to an old ideal. There is no harm in such persons continuing to ply the charkha of their choice; but all others must be replaced, as fast as possible, by the improved Ambar charkha. Production on the latter is more than double that on the traditional charkha; the wages are about double also and the price of the resulting cloth is just half of the khadi woven out of yarn spun on the old equipment. The superiority of the Ambar charkha over the traditional charkha is established in every respect. The replacement proposed, therefore, should be effected without delay.

93. The next phase should cover looms now using mill yarn but which are situated in the neighbourhood of the existing spinners of khadi yarn who will switch over to the spinning of Ambar yarn in keeping with the first phase described above. This will help in forging a link between the weaver and the spinner, will cater for the immediate supply of yarn in fulfilment of an established local demand and simultaneously eliminate expenditure on transport of yarn and other handling arrangements. This linking of the spinner and the weaver will also assist in the realisation of regional self-sufficiency which the Committee considers a very important facet of the programme. The idea of regional self-sufficiency should be propagated and if in any area, local leaders and village headmen undertake to absorb the Ambar cloth produced, that area should be given a high priority.

94. It is recommended that during the first year of the Second Plan, about 75,000 Ambar Charkhas in all should be installed. At the rate of an output of 200 lbs. of yarn per charkha, per year, and taking 3·6 yards to the pound, the total output of Ambar cloth as a result of the installation of 75,000 Ambar charkhas will be about 50 million yards a year. This, the Committee considers a modest target, within the reach of the Ambar Charkha at its present stage of development,

if organisation, training and the programme for manufacture of Ambar charkhas are able to keep pace.

95. After the scheme has run for about 6 months, a review should be made, sometime in December 1956. Results of 6 months' implementation should be examined and on the basis of the findings, the scale of programme for 1957-58 should be determined. It is considered essential that decision for the second year of the Plan should be taken well in advance so that a break is avoided and the organisers are given sufficient notice to make arrangements that would be necessary for a larger programme. It may be possible in December, 1956, to even take a decision for 1958-59, if sufficiently promising data becomes available. It is anticipated that if a fair rate of progress is maintained, it may be possible to introduce anything upto 2 lakh charkhas even in 1957-58. But it has again to be emphasised that a thorough examination of the programme and its results is periodically necessary, until the practicability of the Project is proved beyond doubt. Only then should the scope be extended in a larger way.

96. Some suggestions about the location of the project have already been made. It is further recommended that preference should be given to those areas where there is great need for providing employment. Another consideration should be the availability of locally grown cotton. But what is to be emphasised most of all in the context of location is that the entire Ambar programme should be integrated with the C.P.A. and National Extension Service areas. Doing this will ease the administrative and organisational problems and lend a certain stability to the project.

97. The Committee is of the view that in so far as the class of persons among whom the Ambar programme is to be propagated are concerned, the existing weavers and their families should be drawn upon as extensively as possible. The creation of a new class of weavers should definitely be avoided. If the members of handloom weavers' families are encouraged to take to spinning, the consumption of Ambar yarn for weaving cloth will be to a great extent ensured. In any case, a new class of spinners and weavers at the cost of existing weavers will, in the view of this Committee, be most undesirable. In one of his books entitled "The Economics of Khadi", Gandhiji stated, "Those weavers who do not take to weaving handspun are cutting their own throats, because the natural consequences of the spread of mills will be the destruction of weavers, as it has been that of handspinners. There is no case of handspinning ever hitting a single weaver. In fact, it is his sole protection". Any Ambar project comprising both spinning and weaving should be so designed, organised and implemented that as far as possible, existing handlooms are brought into the scheme to weave Ambar yarn, instead of new handlooms being set up specially for the purpose. Subject to organizational problems being solved in a practical manner, members of weavers' families should be trained and supplied with Ambar charkhas in preference to others. 75 per cent. of the spinners (other than the present spinners of traditional khadi yarn) should be from weavers' families, until nearly all such families have been provided with at least one, preferably two Ambar charkha sets.

98. The Committee is not in favour of establishing centralised spinning units. Subject to organisational problems being solved in a practical manner, Ambar yarn produced for weaving should, except only for the training to be imparted, be spun only in the spinners' homes and not at spinning centres. *Parishramalayas* must necessarily be a passing phase and should be established only for training purposes. Some of the *Parishramalayas* visited by the Committee gave too strong an impression of little factories. One of the features of these *Parishramalayas* that particularly caused anxiety to the committee was the presence of small children, under the age of 10, engaged in regimented productive activity. It is quite another matter if these children take a hand at spinning, or even weaving, as a hobby within their homes and in their leisure time. But organised spinning and weaving by young children of tender age under conditions which are not very unlike those prevailing in factories is considered objectionable.

99. On the administrative side also, the scheme should be progressively decentralised. The Central agency (Government or the Khadi Board) should limit its functions to:

(a) allotment of grants, subsidies and loans;
(b) advice and directions on technical and organizational matters;
(c) research and testing;
(d) co-ordination between decentralised agencies;
(e) "certification", to the extent necessary;
(f) export promotion.

100. Government should set up a special Directorate, strongly staffed by persons, qualified and experienced in the technical aspects, economics, statistics and administration of large scale organisation of village industries, including community projects and co-operatives, to continuously and closely watch the progress of the scheme. There should be an annual review of the progress and further prospects of the scheme, with special attention to organisation, technical improvements, quality of the product, productivity, workers' wages, subsidy element and the extent of its further needs, prices and disposal of yarn. A Textile Research Centre should also be set up for studying and investigating the problems of the decentralised textile industry.

101. One method which is strongly recommended for decentralising the Ambar programme is the establishment of co-operative societies at all levels and for all purposes through which the actual production, distribution and marketing of yarn and cloth could be arranged. Every encouragement and facility should be given for building up a net work of co-operatives for running the Ambar project. But whatever the organisation or location or whatever the mode of operation, any Ambar project must be related directly to the development and transformation of the village economy.

102. In any scheme involving the production of consumer goods, the organisation that is built up for marketing the end-product will really, in the long run, determine its success or failure. In the background of the Committee's recommendation that there should be only a single point subsidy at the retail-sale stage, the marketing aspect

becomes all the more important. In a scheme like the present, where the product is still in the process of evolution and for which, due to its being still at the pioneering stage, market-testing in any appreciable degree has not yet been possible, the organisation that will attend to the sales side of the project must be built up with the utmost care. The future prospects of the Ambar programme also depend on how well the product can be marketed. For the ultimate objective of doing away with the subsidy, in course of time, has to be kept in view. No commodity which, after the trial and the testing period, cannot stand on its own merits, must inevitably die a natural death. The Committee's approach very definitely is that the artificial prop by way of subsidy is strictly an interim and a passing phase. Every stage in the production of Ambar yarn and Ambar cloth must be designed with an eye on its acceptability to the consumer and its capacity to be sold in a competitive market.

103. The Committee has no hesitation in recommending that in order to tide over the difficult transitional period, Government should again lend a helping hand and to the maximum extent possible, obtain their own requirements of cloth from Ambar cloth. It would be useful if Government requirements are linked to the production project directly through the headquarters procurement organisation on the one hand and headquarters production organisation on the other.

104. Emporia are a recognized means of organizing marketing. Ambar emporia should be established in all large towns of the country. But this will not be sufficient. A net work of sales depots in districts and rural areas must also be organised. In addition, sample rooms could be opened, with advantage, under marketing organisations in important cities. Samples of all principal items, along with information about rates, quality, designs and ready stocks in different production centres should be always readily available in order to secure orders and do wholesale business. As production increases, godown and stocking centres must also be established.

105. Since finishing operations are very important for marketing of cloth, finishing centres should be set up in the neighbourhood of weaving units. These centres should be planned forthwith and the possibility of specialisation examined. Each finishing centre must have a bleaching and calendaring section, a dying section, a printing section and designing sections for both printing and weaving. The last mentioned, namely designing section is very important and has special significance in the context of any export trade that might be sought to be developed. It is a known fact that printed hand-spun, hand-woven cloth has a very promising market in foreign countries and provided the designs are attractive, varied and conforming to the tastes of the people for whom they are intended; and provided adequate publicity is organized, there is reason to hope that a flourishing export trade in printed Ambar fabrics can be developed. Publicity in fact is a very important factor in marketing and must be given special attention both for internal and external sales. Another factor which will need attention is quality marking both at the yarn stage and the cloth stage. Quality marking will help in gaining the confidence of the consumer in Ambar cloth at home and abroad and will simultaneously increase its salability.

106. If the type of marketing, organizational and other facilities described above are afforded to the Ambar charkha programme, the Committee believes that decentralised production of Ambar yarn and Ambar cloth will prove a fruitful source, not only for a large volume of employment but that this employment will be steady, full-time and the wages earned therefrom will progressively tend to give to the spinner and weaver a better living wage. As stated earlier, one basic assumption on which the Committee has worked is the need to give more employment. In fact, the cause which the Ambar programme is expected to serve is this very need to relieve the existing acute unemployment and under-employment, particularly in rural areas, by providing substantive or subsidiary occupation to the villager and thereby improving his economic condition. The Ambar programme might even make some contribution in relieving educated unemployment in the urban areas, if as a result of research, productivity increases and the earnings go up.

107. At this stage, it is difficult to assess the extent to which the Ambar programme will contribute towards the solution of the unemployment problem. The future scope and size of the programme and therefore, its ultimate capacity to give more employment will depend on the successive evolution of the programme made periodically and the resultant expansion of the programme, as a consequence of these findings. The need for continuous research, experiment and evaluation has already been sufficiently stressed. The faster the technological progress, the more efficient the administration, the greater will be the size of the programme and the greater will be the latter's capacity to provide gainful employment.

108. The Committee has, for the present, made a specific recommendation only for 1956-57. On the basis of 75,000 Ambar Charkhas, approximate employment estimates are as under:—

| | | |
|---|---|---|
| (1) Spinners—full-time employment for 300 days in the year | About | 1,50,000 |
| (2) Weavers | ,, | 10,000 |
| (3) Weavers' assistants | ,, | 20,000 |
| (4) Carpenters | ,, | 1,000 |
| (5) Instructors and workers | ,, | 1,600 |
| (6) Others | ,, | 1,000 |
| | About | 1,83,600 |

Thus even upon the interim programme of 75,000 Ambar charkhas which the Committee is recommending nearly two lakh persons will obtain employment If in a decentralised system, the spinners and weavers work only part-time, the figures will increase and relief will be larger in terms of providing subsidiary employment. The potentialities are promising and during the Second Plan period, if progress and technological improvement continue rapidly, the Ambar programme should become instrumental in making a considerable contribution to the unemployment problem.

## *ACKNOWLEDGMENTS*

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(2) The Technological Laboratory, Indian Central Cotton Committee, Adenwalla Road, Matunga—Bombay-19.

(3) The Krishnarajendra Silver Jubilee Technological Institute, Bangalore.

(4) The Bengal Textile Institute, Serampore.

(5) The Kala Bhavan, Baroda.

(6) Government Central Textile Institute, Kanpur.

(7) Government Textile Institute, Madras.

(8) Government Institute of Dyeing & Calico Printing, Ludhiana.

110. The office of the Textile Commissioner helped in preparing the design of experiments which were conducted at the different institutes.

111. We received ready and willing help from a large number of individuals, both official and non-official. Discussions with many of them were of great help in enabling the Committee to reach its conclusions and recommendations. We would like to make special mention of:—

1. Shri Vaikunthlal Mehta, Chairman All-India Khadi & Village Industries Board, Bombay.

2. Shri Shankerlal Banker, constructive and social worker, Ahmedabad.

3. Shri Krishandas Gandhi, Sarva Seva Sangh, Wardha (M.P.).

4. Shri Prabhudas Gandhi, Secretary, Harijan Ashram Sabarmati, Ahmedabad.

5. Shri Raojibhai Patel, Member, All-India Khadi & Village Industries Board, Bombay.

6. Shri Pranlal. S. Kapadia, Member Secretary, All-India Khadi & Village Industries Board, Bombay.

7. Shri Vikram Sarabhai, Director, Ahmedabad Textile Industry's Research Association, Navarangpura, Ahmedabad (9).
8. Shri B. K. Vaidya, Dy. Director, Ahmedabad Textile Industry's Research Association, Navarangpura, Ahmedabad (9).
9. Shrimati Amtus Salam, Secretary, Kasturba Seva Mandir, Rajpura.
10. Shri Gopi Chand Bhargava, President, Punjab Khadi Gramodyog Sangh, Adampur.
11. Shri Hari Ram Chopra, Secretary, Punjab Khadi Gramodyog Sangh, Adampur.
12. Shri Ramachandran Sanchalak Akil Bharat Sarva Seva Sangh, Tirupur.
13. Shri C. Nanjundayya, Director, Technological Laboratory, Indian Central Cotton Committee, Adenwala Road, Matunga, Bombay-19.
14. Shri S. R. Kaiwar, I.C.S., Director of Industries & Commerce, Andhra.
15. Shri L. C. Gupta, Joint Director of Industries, U.P., Kanpur.
16. Shri Paramjit Singh, Director of Industries, P.E.P.S.U.
17. Shri Thirumlaiswami, Khadi Special Assistant, Tirupur.
18. Shri J. N. Singh, Principal, Government Central Textile Institute, Kanpur.
19. Shri J. D. Sundaram, Director of Economic Research, Khadi & Village Industries Board, Bombay.
20. Shri P. V. S. Murthy, Assistant Director, C.S.O., New Delhi.

112. We would like to record our appreciation of the hard work put in by the Secretariat of the Committee, particularly our Secretary Shrimati P. Johari. Her hard work and unremitting devotion to duty has enabled the Committee to complete its work and to submit its report in good time.

# APPENDIX I

## Summary of the Ambar Charkha programme of the All-India Khadi and Village Industries Board based on The Board's pamphlet on the subject with subsequent modifications.

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# APPENDIX I

## Summary of the Ambar Charkha Programme of the All India Khadi and Village Industries Board based on the Board's Pamphlet on this subject.

1. The first and fundamental assumption on which the Khadi Board has based its Ambar Charkha programme is the anticipation that the production of cloth by mills and powerlooms would be frozen at its 1955-level and that the total estimated additional requirement of cloth during the Second Plan period and the total quantity of yarn required for this additional yardage would be produced on a decentralised basis. According to the calculations made by the Karve Committee, the anticipated increase in cloth consumption, in the last year of the Second Plan would be between 1,400 and 1,700 million yards. For this, or say, an average addition of 1,500 million yards of cloth, the Khadi Board have estimated that in 1960-61, the output of yarn should be 412·5 million lbs. The Board's programme has, therefore, been prepared in order to achieve the target of a production of 412.5 million lbs. of yarn during the last year of the Second Plan.

2. Before the various aspects of the programme are described in detail, it would be appropriate to indicate the principal inspiration behind the Board's planning in general and their attitude to the charkha, in particular. For their concept of the perfect charkha has its origin in what Gandhiji said and wrote about this subject. To Gandhiji, the charkha was an effective instrument, not only for attaining total self-sufficiency in cloth, through the utilization of wide-spread knowledge and skill in hand-spinning and hand-weaving, and consequently total independence from foreign imports, but also for inculcating the lessons of self-help and profitable use of leisure time, to secure relief from poverty. In his view, the universalisation of the charkha and effective integration of hand-spinning with hand-weaving, alone, would provide the true basis for an effective revival of India's decentralised cotton textile industry. To be acceptable to Gandhiji, a charkha had to be capable of being introduced and operated in the smallest of India's cottages; had to be capable of producing yarn of good quality and a definite quantity to assure the spinner, a living wage and had to be capable of being manufactured and serviced by the village artisan. According to Gandhiji, competitive economy gave rise to aggression and violence and ultimately led to destruction. The growth of population, he felt, necessitated the giving of part-time occupation to the village-folk, when agriculture did not demand their time and attention. The Khadi industry, in Gandhiji's belief, was the most suitable medium for affording this part-time occupation for supplementing the meagre incomes of the agriculturists.

*Evolution of the Ambar Charkha:*

3. It was as far back as 1919 that a search for a better and more effective charkha and one that was nearer to Gandhiji's ideal, was

initiated. For, although the traditional charkha was satisfactory from the employment view-point, it was unable to give the spinner a living wage and unable to produce yarn in sufficient quantities. It, therefore, did not have the capacity to ensure self-sufficiency in cloth. In 1923, Gandhiji offered a prize of Rs. 5,000 for research to evolve a charkha with a higher production potential. Many models, both indigenous and foreign, were presented to him, but they were found unsatisfactory, either because of their cost or involved mechanism. Shri Purshoutam Das one-spindle 'Jeevan charkha' and Shri Kale's two-spindle and six-spindle charkhas attracted some attention but even these did not pass the tests that Gandhiji had laid down. In 1929, Gandhiji once again offered a prize, this time of Rs. 1 lakh, for the invention of a charkha which satisfied all the prescribed conditions. Shri Kale's improved 10-spindle charkha manufactured in 1937, was considered satisfactory on the score of productivity and the quality of its yarn. But this too was rejected because it was not capable of being manufactured in the village and was too large to be set up in the average small village hut. Its price also was beyond the means of an average villager. A Japanese model was offered for scrutiny but this too was found unacceptable, because of its intricate mechanism and because it was beyond the financial means of the village artisan. Two charkhas, one constructed by Rajgopalan and another by Nagin Das came into prominence but these too failed to satisfy the prescribed criteria. It was only in 1949, that a two spindle wooden charkha was given to the Akhil Bharat Charkha Sangh by Shri Ekambara Nathan of Papankulam in Tamilnad. The simple mechanism of the charkha, its production capacity and ease of manufacture led the All India Spinners Association to take it up for further research. Shri Ekambara Nathan was rewarded for his enterprise and was also given facilities for further experimentation, with a view to improving his model. In 1950-51, Shri Ekambara Nathan, assisted by a colleague, produced a four-spindle charkha, made of wood only. The introduction of the multigrooved pullies to regulate the count of yarn was one of its special features. However, the operational problems continued to be many and further research was, therefore, ordered. In August, 1953, another model was invented with gear wheels and the construction of which was almost wholly in metal. The operational difficulties, still continued and its price which was in the neighbourhood of Rs. 400 was considered too high in conditions prevailing in the rural areas of the country. Finally, about the close of the year 1954, Shri Nandlal constructed a four-spindle wooden charkha, based on the previous models of Shri Ekambara Nathan. The wooden bobbin was replaced by a paper-bobbin and several other similar improvements were effected. As a result of this research, the Ambar Charkha came into existence. It was found cheap, efficient, with a comparatively higher productivity and was capable of being manufactured by the village artisan.

### *Description of the components of the three-units Ambar Charkha set.*

4. The Ambar charkha set consists of three-units:—

(a) *The dhunai modia* (Carding Unit).—The *dhunai modia* or the carding machine consists of a large wooden wheel which is linked by a cotton band, to a grooved pulley. This pulley rotates a fluted feel roller about 3" long and 3/8" in diameter. The fluted roller delivers the lint to a wooden cylinder fitted with tin-spikes. Connected with this wooden cylinder, is a small wire cage 6″ wide, 18″ long and 8″ high. The cylinder revolves at a high speed when the main wheel is operated and the fibres are thrown out, by centrifugal force, into the cage.

(b) *The belni* (Silvering Unit).—This consists of 2 pairs of steel drawing rollers, the lower rollers are fluted while the upper are covered by rubber. The loose cotton fibres opened by the *Dhunai Modia* are drawn between these rollers and formed into rovings by a funnel and collected in a small tin cylinder. The tin cylinder is 8″ in height, 5″ in diameter and has a ring fixed at the centre.

(c) *The Charkha* (Spinning Unit).—A four-spindle, hand-operated wooden spinning wheel, 21″ long, 16″ broad and 21″ high. Apart from the frame made of seasoned wood, there are 3 wooden multi-grooved pulleys, one with four grooves, another with three and the third with two, each of which is connected with the main hand-operated wheel by cotton bands. The iron parts of the charkha consist of four-spindle rings, four fluted rollers, one pair of gear wheels, arbour, boss, travellers and springs. There are also 4 pairs of rubber rollers, over the metal-fluted rollers, about 1¼″ broad.

All the three units together cost Rs. 100.* The price of the ring frame is Rs. 40; that of the *Dhunai Modia* Rs. 35 and that of the *Belni* is Rs. 25.

*Assumptions on which the Board's Draft Programme is based.*

5. After the present Ambar charkha set had been standardised and before the Board drafted its programme, it ordered a number of tests and experiments at Wardha and Nasik. According to the findings of these tests:—

(a) a man working on the Ambar Charkha can produce, on an average, 8 hanks of 20-counts per day of 8 hours, from carding of cotton to spinning, or 16 hanks of yarn per day, if he limits his labour to spinning only;

(b) the yarn so produced is in the range of 12 to 40 counts depending on the quality and staple of the cotton used; and

(c) the tensile strength of the yarn produced is between 70 to 100 per cent.

Another major assumption which plays an important part in determining the cost of production of yarn, pertains to a conclusion recently reached by the Board that a spinner should get a minimum of annas 0-12-0 per 8 hour working day.

*Scope and principal features of the programme.*

6. The Board's programme envisaged the installation of 25 lakh Ambar-charkhas which in 1960-61, are estimated to produce 412·5 million lbs. of yarn. The following table gives at a glance, information in regard to the annual installation of Ambar charkhas, annual output of yarn, annual production of cloth, annual consumption of yarn for "Khadi" and yarn that would be available for distribution to the handloom weavers:

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*Subsequently, the Ahmedabad Textile Industries Research Association has evolved an improved model which according to information received from the Board costs between Rs. 120 & Rs. 130.

## TABLE

| | 1956-57 | 57-58 | 58-59 | 59-60 | 60-61 | Total |
|---|---|---|---|---|---|---|
| 1. Annual Output of yarn (million lbs.) . . | 20·6 | 61·9 | 144·4 | 268·2 | 412·5 | 907·6 |
| 2. Annual additional charkha sets required (lakhs) . . | 1·25 | 2·50 | 5·00 | 7·50 | 8·75 | 25·0 |
| 3. Total charkhas operating. . | 1·25 | 3·75 | 8·75 | 16·25 | 25·00 | 25·00 |
| 4. Annual Production of Cloth (Million yards) | 75 | 225 | 525 | 975 | 1500 | 3300 |
| 5. Annual production of Khadi | 75 | 225 | 225 | 225 | 225 | 975 |
| 6. Annual consumption of yarn in Khadi . . | 18·75 | 56·25 | 56·25 | 56·25 | 56·25 | 243·75 |
| 7. Yarn available for distribution to the handlooms . . | 1·85* | 5·65* | 88·15 | 211·95 | 356·25 | 663·85 |

*Though surplus over the actual requirements, yarn may not be available for sale during the first year and only 3·65 million lbs. may be available in the second year, the balance being absorbed in stocks or in transit with the production centres.

### *Economic Implications of the programme*:

7. What the Board has proposed is that the entire difference between the price of Ambar yarn and the price of ordinary reeled mill yarn should be subsidized by Government. They have also recommended that the Ambar Charkha should be supplied on a subsidised basis—50 per cent. of the cost being given as an outright grant to the spinner. In addition, they have asked for a subsidy of 4 annas in a rupee on all retail sales of "Khadi" produced with Ambar yarn, so as to cover the major portion of the difference between the prices of Ambar Khadi and mill cloth of comparable counts. Apart from the above detailed direct expenditure, the Board also requires loans towards working capital.

8. *Cost of Production of yarn.*—The assumptions on which the production cost of Ambar yarn is worked by the Board are:

(1) a wage rate of As. 0-12-0 a day to the spinner, calculated on the basis of the assumed daily production of 8 hanks. In other words, a spinner is to be paid a piece rate of As. 1½ per hank of yarn or annas 0-12-0 for 8 hanks;

(2) raw cotton at Rs. 700 per candy for 20 counts at Rs. 600 per candy, for 16 counts;

(3) a margin of about 12½ per cent. to 13 per cent. for wastage; and

(4) handling charges at 6¼ per cent. of the cost.

The following table shows the estimated prices of Ambar yarn per lb. of 16's, 18's and 20's:—

| | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | p. |
|---|---|---|---|---|---|---|---|---|---|
| 1. Raw Cotton | 0 | 12 | 3 | 0 | 14 | 2 | 0 | 14 | 2 |
| 2. Wastage | 0 | 1 | 7 | 0 | 1 | 9 | 0 | 1 | 9 |
| 3. Spinning wages | 1 | 8 | 0 | 1 | 11 | 0 | 1 | 14 | 0 |
| Cost per lb. of yarn | 2 | 5 | 10 | 2 | 10 | 11 | 2 | 13 | 11 |
| (6¼% of cost for handling charges) | 0 | 2 | 5 | 0 | 2 | 8 | 0 | 2 | 10 |
| Price per lb. | 2 | 8 | 3 | 2 | 13 | 7 | 3 | 0 | 9 |

The comparative prices of Ambar yarn and mill yarn of 16's, 18's and 20's are as follows:—

| Counts | Ambar | Mill | Difference% |
|---|---|---|---|
| 16's | 2 8 3 | 1 8 0 | 67·71 |
| 18's | 2 13 7 | 1 9 6 | 78·76 |
| 20's | 3 0 9 | 1 10 6 | 83·96 |

9. *Subsidy on the production and distribution of yarn.*—Since the Board's programme envisages production of yarn in the range of 16's to 20's or on an average of 18's, the average difference between the prices of Ambar and mill yarn would be Rs. 1-4-0. In the rural areas, this difference is expected to be reduced to Re. 1-1-0, since transport and other charges on mill yarn would increase. In order to make it worthwhile for the handloom weaver to use Ambar yarn, it will, according to the Khadi Board, be necessary for Government to subsidise the entire difference in price. Since the total yarn that will be available for distribution to handloom weavers is calculated at 660 million lbs., the total amount of subsidy required on this score, at the rate of the maximum of Re. 1-4-0 per lb. would be Rs. 82·5 crores for the whole period of the Second Plan.

10. *Subsidy on the production and distribution of Ambar charkhas.*—For 25 lakh Ambar charkhas at the rate of Rs. 100 per charkha the subsidy at 50 per cent. of the cost comes to Rs. 12·5 crores. (Since, however, the cost of the improved model is Rs. 130, the subsidy on the distribution of Ambar charkhas would rise from Rs. 12·5 crores to Rs. 16·25 crores).

11. *Subsidy on Ambar Khadi.*—For traditional Khadi, the cost of which is about double that of Ambar Khadi, Government are already giving a rebate of 3 annas in the rupee on retail sales and a subsidy of 1 anna in the rupee as a bonus on increased production and sales. The Board's proposal is to continue to obtain a total subsidy of 4 annas in the rupee on Ambar Khadi so as to bring down its cost very close to the level of comparable mill cloth. The Board has estimated a total output of 975 million yards of Ambar Khadi during the Second Plan. The cost of production of Ambar Khadi has been assumed by the Board at an average of Re. 1-2-0 per yard. The total subsidy required for selling Ambar Khadi would, therefore, come to Rs. 27·4 crores during the period of the Second Plan.

12. *Loans.*—According to the Board, working capital will be required for running *Saranjam* centres, for stocking cotton, for maintaining yarn stocks and for the production and sale of cloth. The total loan requirements for the five year period are estimated to be Rs. 62·4 crores.

13. *Miscellaneous items.*—A sum of Rs. 1·01 crores is required for *Saranjam,* Rs. 3·4 crores for production and finishing centres, Rs. 1 crore for organisation and research and Rs. 16·16 crores for the training programme.

The total cost of the programme for the period of the Second Plan is, therefore, as follows:

| | | *(In crores of rupees)* |
|---|---|---|
| 1. | Distribution of Ambar charkhas | 16·25 |
| 2. | Subsidy on yarn | 82·50 |
| 3. | Subsidy on manufacture of Ambar Khadi | 27·42 |
| 4. | Training programme | 16·16 |
| 5. | Production and finishing centres | 3·40 |
| 6. | Saranjam centres | 1·01 |
| 7. | Organisation and research | 1·00 |
| | Total | 147·74 |
| | Loan | 62·40 |
| | GRAND TOTAL | 210·14 |

*Organizational arrangements:*

14. On the organisational side, the Board envisages the establishment of 300 *Saranjam* centres for the manufacture of charkhas. It may even consider the manufacture of the precision parts in already established engineering units and factories in different parts of the country. 35 *Vidyalayas* for training instructors and 1,950 *Parishramalayas* for training spinners are also proposed to be established. In addition, the Board proposes to establish in each year of the Plan, 60 main production centres and 120 new sub-production centres for the actual spinning of yarn. Some of the existing 500 centres, previously affiliated to the All India Spinners' Association, will also be utilised for the programme. Other organisations like the Kasturba Trust, Gandhi Smarak Nidhi and the Sarva Seva Sangh will also be utilised for implementing the programme.

*Employment and social benefits.*

15. According to the estimates of the Khadi Board, the implementation of the programme is likely to provide gainful employment to 50 lakhs spinners (part time and full time) or in terms of full employment to 36 lakhs spinners, in the manufacture of Ambar yarn. 8·33 lakh weavers and 4·17 lakh weavers' assistants will also find employment in the manufacture of cloth. In the manufacture of Ambar Charkha sets, the programme is likely to provide employment to 12,780 carpenters. Besides, this, a number of managerial, technical and clerical jobs will be created. The Board has estimated that the additional employment created would involve payment of Rs. 296·77 crores by way of wages.

16. According to the Board, the greatest contribution that its programme will make is the political, social and moral uplift of the country, as a whole, through so large a number of persons finding gainful full time employment in relatively healthier rural surroundings.

Note:—On the eve of the Committee's Session in Delhi, between 21st and 23rd May, 1956, the All India Khadi and Village Industries Board forwarded, in response to the Committee's questionnaire on economic aspects, tentative revised figures regarding total production of Ambar Khadi and the subsidy required on the marketable surplus. In the meeting of the Board held in Cangeevaram, the Ambar Programme was revised. The relevant letters are reproduced below.

## II

### Letter No. ECR/A.C./56, dated the 18th May 1956, from the Khadi Board referred to in the note.

Subject:—*Questionnaire on the economic aspects of the Ambar Charkha.*

Dear Smt. Johari,

Will you please refer to your circular letters No. 4-A.C.C./56 (B), dated May 1 and May 10, 1956? I am to furnish replies to the questions posed in these letters as follows:—

A(1) *Raw material.*—The average price of raw cotton for the manufacture of yarn of 16's should be Rs. 600 per candy and of 20's Rs. 700 per candy. These are, however, the barest minimum today as price fluctuations during the last few months have been very wide.

(2) The Board is of the view that a daily wage of 12 annas to the spinner is reasonable. Though the all-India average agricultural wage varies from occupation to occupation and ranges between 14 annas to Re. 1-2-0 per day, work available to agricultural labour over the major portion of countryside is only for a very limited period. Consequently, if it is spread over the entire year of 300 days, the all-India average wage, computed by the Agricultural Labour Enquiry Committee, will be seen to be lower than the wage proposed by the Board for the spinner on the Ambar Charkha.

(3) *Overheads.*—The overhead charges on the present traditional Khadi are computed at 18¾ per cent.; these are inclusive of establishment, transport, insurance etc. In the Ambar Charkha scheme, the Board expects a progressive reduction in the overhead costs from the present 18¾ per cent. to 12½ per cent. By what stages this reduction will be effected and by how much are points that cannot now be indicated.

(4) *Handling charges.*—(i) The Board contemplates a thorough revision of its earlier Ambar Charkha Programme and directly undertaking the manufacture of cloth from yarn produced on the Ambar Charkha. The question of handling charges or its appropriate percentage of total costs may not, therefore, arise.

(ii) Does not arise.

(5) *Wastage.*—The Board's Ambar Charkha Programme allows for 12½ per cent. of the cost of raw cotton for wastage. The details set out in the enclosed table, show the wide variations in the percentage of wastage of raw cotton in carding, silvering and spinning. The

Board considers 12½ per cent. allowance, on a national average, for calculating the price of yarn as reasonable.

B. In view of the answer to question A(4), these questions do not arise.

*Subsidy.*—A firm answer to the additional question forwarded with your letter No. 4-A.C.C./56 of May 10, cannot be given till after the Board's meeting at Canjeevaram. The figures furnished below are tentative. As several months of the first year of the Plan period have elapsed without any preparation for the implementation of the Board's Ambar Charkha Programme and only four effective years are available, the progression in production may have to be revised as shown in the table below. The Board believes that 25 per cent. of the annual output of cloth with Ambar yarn may be consumed by the spinners, weavers and their respective families. Consequently, only 75 per cent. of the annual output of cloth may have to be marketed either locally, regionally or through special shops. The subsidy on cloth is calculated at the rate of 4 annas in the rupee, and the cost per yard of cloth is the same as in the Board's latest Ambar Charkha Programme. The subsidy at 4 annas in the rupee represents the payment of an additional subsidy of 2 annas in the rupee, as all handloom cloth today enjoys a 2 anna rebate in the rupee.

Yours sincerely,
(Sd.) J. D. Sundram.

Smt. P. Johari,
Dy. Secretary to the Govt. of India,
Ministry of Production, Thappar House,
New Delhi.

## REGION-WISE ANALYSIS OF WASTAGE

| Region | Quality of cotton supplied | Count range | Percentage of wastage |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Bengal | Jarilla | 15—20 | 11·08 |
| 2. Andhra | Red cotton | 9—20 | 13·53 |
| 3. Karnatak | Jaydhar | 12—20 | 18·50 |
| 4. Maharashtra | 197/3 | 13—20 | 12·07 |
| 5. Kerala | Jarill and Karanganni | 11—20 | 11·63 |
| 6. Tamil Nad | Ukkanta and Karanganni | 13—24 | 9·80 |
| 7. Utkal | Jarilla | 12—20 | 21·68 |
| 8. U. P. | Jarilla | 14—16 | 7·45 |
| 9. Punjab | Surti | 12—18 | 15·99 |
| 10. Bihar | Navsari | 12—25 | 11·66 |
| 11. Madhya Bharat | 197/3 | 13—16 | 6·19 |
| 12. Hyderabad | Navsari | 12—30 | 6·31 |
| 13. Saurashtra | Vijay | 11—20 | 14·60 |

Source : Data on Spinning Competitions on the Ambar Charkha conducted at the various Parishrmalayas after April 13,1956.

*Tentative Estimates of Production of Ambar Khadi*

| Items | Unit | 1956-57 | 1957-58 | 1958-59 | 1959-60 | 1960-61 | Total |
|---|---|---|---|---|---|---|---|
| | Mn.Yds. | | | | | | |
| 1. Production of Khadi | " | 25 | 175 | 500 | 800 | 1,000 | 2,500 |
| 2. Vastraswavalamban at 25 per cent. | " | 6·25 | 43·75 | 125 | 200 | 250 | 625·00 |
| 3. Marketable surplus | " | 18·75 | 131·25 | 375 | 600 | 750 | 1875·00 |
| 4. Value of cloth at Re. 1-2-0 per yard. | Rs. crores | 2·11 | 14·77 | 42·19 | 67·50 | 84·38 | 210·95 |
| 5. Subsidy at -/4/- in the rupee | " | 0·53 | 3·69 | 10·55 | 16·88 | 21·09 | 52·74 |

## III

GOVERNMENT OF INDIA

**MINISTRY OF PRODUCTION**

All India Khadi and Village Industries Board

**No. ECR/AC**

101, Queen's Road
Bombay 1: 1-6-1956.

My dear Shree Reddy,

In the original Five-Year Plan submitted by the Board last year to the Planning Commission through your Ministry, the Board had put forward a programme for the supply of yarn turned out on the Ambar Charkha to the handloom weaving industry. In view of the decision of the Akhil Bharat Sarva Seva Sangh to treat as Khadi cloth woven with Ambar Charkha yarn, the Board at its last meeting has decided to make itself responsible, under the scheme, not for the supply of yarn but for the production and supply of Khadi cloth. This is also in consonance with the views expressed at a meeting of representatives of Khadi organizations held at Ahmedabad early in April.

This decision will slightly affect the scheme of expenditure submitted by the Board for the programme for 1956-57. It alters also the basis and quantum of the subsidy that is claimed under the scheme. I enclose herewith a brief note clearly setting forth the modifications that are necessary.

Yours sincerely,
(Sd.) V. L. MEHTA,

Enclos. as above.

Shree K. C. Reddy,
Minister for Production,
Government of India,
New Delhi.

## Change in the Board's Ambar Charkha Programme

In pursuance of the decision of the Akhil Bharat Sarva Seva Sangh to treat as Khadi cloth woven from Ambar yarn and the resolution of the Khadi Workers at their meeting in Ahmedabad, the Board, at its meeting in Canjeevaram, decided to undertake directly the responsibility for the manufacture of cloth from all the yarn turned out on the Ambar Charkha instead of distributing it to the handlooms as envisaged in its earlier programme.

The Board's decision to revise its earlier Ambar Charkha programme implies:

(i) the manufacture and consumption of all yarn turned out on the Ambar Charkha for the production of Khadi;

(ii) payment of a subsidy at 4 as. in the rupee at a single point, *viz.*, at the production-stage in the case of vastra swavalamban and at the retail stage in the case of marketable surplus, instead of at two points in the earlier programme *viz.*, at the point of distribution of yarn to the handlooms and at the retail sales point.

The revision of the earlier programme very materially alters the proportion of subsidy to the wages paid. In the earlier programme, the distribution of Ambar yarn to the handlooms through the Handloom Board envisaged the payment of a subsidy on Ambar yarn at about Re. 1-1-0 per lb. to equalize the prices of Ambar and mill yarn. The Handloom Board pays a subsidy of Re. 0-1-6 per rupee on the whole sale and/or retail sales of handloom cloth through recognized co-operative societies. At an average of 4 yards of cloth to a pound of yarn, this would have meant the payment of a total subsidy of 5½ annas per yard of cloth woven from Ambar yarn by the handlooms covered by the Handloom Board as against 4½ annas per yard on the cloth manufactured by the Board's production centres. The Board's decision to undertake directly the responsibility for the manufacture of cloth obviates this anomalous position, and substantially reduces the subsidy element in the wages per yard of cloth as shown below:—

Price per square yard of Ambar cloth of 16's

| | Rs. | As. | Ps. |
|---|---|---|---|
| 1. Raw Cotton | 0 | 3 | 1 |
| 2. Wastage @ 12½% | 0 | 0 | 5 |
| 3. Spinning wages & 1½ as. per hank & 4 hanks per yard | 0 | 6 | 0 |
| 4. Weaving wages per yd. @ 4 as. a yd. | 0 | 4 | 0 |
| 5. Total cost | 0 | 13 | 6 |
| 6. Overheads at 12½% of cost | 0 | 1 | 8 |
| 7. Total price | 0 | 15 | 2 |
| 8. Subsidy @ As. in the rupee | 0 | 3 | 10 |
| 9. Retail Price | 0 | 11 | 4 |

The table above brings out clearly that of the total cost of production of one yard of Khadi, 10 annas are the wages (spinning 6 annas and weaving 4 annas) and the balance the cost of raw materials and overhead expenses. The subsidy of Re. 0-3-10 constitutes 38 per cent. of the wage-cost yer yard of cloth.

The Board is not in a position to indicate the size of its programme during the Second Plan period as the decision of the Government and the Planning Commission is yet to be known. The broad details outlined above are merely to emphasize the basic changes that have been made in its programme.

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# APPENDIX I

## Questionnaire issued by the Committee on the technical aspects of the Ambar Charkha.

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# APPENDIX II

## QUESTIONNAIRE ISSUED BY THE COMMITTEE ON THE TECHNICAL ASPECTS OF THE AMBAR CHARKHA

### QUESTIONNAIRE

(A) *The Charkha Set*

1. For what period of time have you been experimenting with the Ambar Charkha?

2. Do you consider the Charkha set a technically sound implement?

3. Is the mechanism simple or complicated?

4. Is it easy to operate?

5. Is it capable of easy repair and replacement of parts that might become worn out?

6. Is there any scope for immediate adjustment in the Charkha set, so as to make it a more effective instrument of production?

7. Whether the different tools or machine comprising the Ambar Charkha set are capable of being worked with hand?

8. Can the existing Ambar Charkha be easily adapted for being worked with electricity?

9. Some of the parts of Ambar Charkha which are in the nature of precision parts—can these be manufactured by ordinary carpenters? Should they be manufactured in several centres or in one or more mechanised workshops, in order to maintain uniformity?

10. *What experiments have been conducted by you with the Ambar Charkha* (*Please give full details*)?

(B) *Quantitative Production*

1. How many hanks of yarn can an average adult produce in 8 hours of effective work, *if work is done from carding to spinning as also if work is limited to spinning only.*

2. At what period of time, during an eight-hour-day, would the spinner show signs of fatigue which might lower his production capacity?

3. What intervals of rest would be necessary and at what frequency, to ensure that a spinner is able to maintain a production rate of 8 hanks of yarn in a day of 8 effective working hours?

4. Given the required intervals of rest, would an average adult be able to continuously produce 8 hanks of yarn per eight-hour-day if he works on the Charkha for months together taking into account fatigue, psychological and other factors?

5. What is the period of training that an average adult would require to enable him to produce 8 hanks of yarn in a day of 8 effective working hours?

6. Would the spinner require any further training by way of refresher course? If so, for what period?

(C) *Quality of Cotton*

1. Have the experiments in your institution been conducted with high grade cotton or varying grades of cotton?

2. What counts of yarn are produced with varying grades of cotton?

3. What is the out-put of yarn, if average qualities cotton which are available in bulk, are used by the spinner?

4. Is it necessary to fix any particular variety of cotton for producing different counts of yarn?

(D) *Qualitative Production*

1. Is the yarn produced, clean and smooth?

2. What are the count variations, in a unit of one hank of yarn?

3. What is the tensile strength of the yarn?

4. Is the yarn produced, capable of passing through the reeds, during weaving, without many breakages, because of the variations in the counts?

5. What should be the maximum count variation, in order to reduce breakages to the minimum?

6. Whether the Ambar Charkha set is capable of producing yarn of course, medium and fine counts?

7. What adjustments, if any, are required for producing yarn of different counts?

8. What actual count-ranges, is the Ambar Charkha set capable of producing? For example 6's to 18's, 18's to 32's, 32's to 48's etc.

9. How does the strength and count variation of Ambar yarn compare with the average reeled yarn of identical counts?

10. *What is the variation in tensile strength of yarn produced?*

11. *What are the turns per inch put in and the variation of such turns per inch in the yarn?*

12. *What is the evenness of the yarn produced?*

13. *How does the Ambar Charkha yarn compare with mill (reeled) yarn of identical count in regard to evenness of the yarn spun, its cleanliness, neppiness, variation in the tensile strength, regularity of the flow of twist and other relevant matters?*

(E) *Weaving*

1. Is the yarn of sufficient strength, to eliminate difficulty in sizing and weaving?

2. Whether it is capable of being woven, more or less, as easily as the average reeled yarn available to handloom weavers.

3. In the background of the weaving-tests conducted in your institution and in the background of the quality of yarn produced by the Ambar Charkha, what textures of cloth, of specified reeds and picks would you consider capable of being woven by handloom weavers?

(F) *Wastage*

1. What is the percentage of wastage in spinning?

2. How does this compare with wastage in producing mill-yarn of identical counts?

3. What is the percentage of wastage in weaving?

4. How does this compare with wastage in weaving with reeled yarn?

(G) *Miscellaneous*

1. *What are the re-actions of the Ambar yarn to bleaching and dyeing and how these compare with the re-actions of mill (reeled) yarn to similar processes?*

NOTE.—The questions in italics were added in pursuance of the decisions taken by the Committee at the first meeting—held on 13th March, 1956.

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# APPENDIX III

## Questionnaire issued by the Committee on the economic aspects of the Ambar Charkha.

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# APPENDIX III

## QUESTIONNAIRE ISSUED BY THE COMMITTEE ON THE ECONOMIC ASPECTS OF THE AMBAR CHARKHA

(A) *Cost of production of yarn*

(1) *Raw material.*—Assuming that Ambar yarn in a range of 16 to 20 counts is to be produced, with indigenously grown cotton, what is the average price of cotton per candy that should be taken for purposes of calculating cost of production of yarn?

(2) *Wage.*—Keeping in mind the conditions of work and the average prevailing agricultural wage, what would you consider a reasonable wage for the spinner, per 8 hour day?

(3) *Overheads.*—What percentage of the total cost of production should be added for overhead charges?

(4) *Handling.*—(i) Do you consider that a separate percentage to meet handling charges should be included, in addition to the overheads?

(ii) If so, what should be the percentage?

(5) *Wastage.*—What in your view is the percentage of cost that should be added on account of wastage?

(B) *Subsidy on distribution of yarn*

(1) In the background of the replies you give to questions under group (A), what would be the approximate total cost of production per lb. of yarn?

(2) What is the difference between this and the cost of ordinary reeled yarn between the ranges of 16's and 20's?

(3) What percentage of the difference should be subsidized by Government, in order to make Ambar yarn competitive?

(4) In order to make Ambar yarn competitive, *vis-a-vis* mill yarn of comparable counts, would you recommend an outright subsidy, or would you consider the placing of a ban on production by mills, below a certain count range, say for example 16's to 20's?

(5) If the latter alternative under question (B) (4) is preferred, please state your reasons for and against the creation of the inevitable monopoly and its consequences on the ultimate consumer of cloth.

(C) **Subsidy on the distribution of Ambar Charkha*

(1) What is your estimate of the cost of production of your model of the Ambar Charkha?

(2) Should the Charkha be supplied to the spinners at a subsidized rate?

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**Addressed only to A.T.I.R.A. and Messrs Sunder Saw Mills, Bombay.*

(3) If so, what percentage of the cost should be paid as an outright grant?

(D) *Subsidy on Ambar Khadi*

What would be the extent of the subsidy in each year of the Second Plan, if Ambar Charkha cloth is to be made salable?

# APPENDIX IV

## Replies to the Questionnaire on technical aspects

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# APPENDIX IV

## I

## THE AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION NAVRANGPURA, AHMEDABAD-9.

### REPLIES TO THE AMBAR CHARKHA QUESTIONNAIRE FROM THE MINISTRY OF PRODUCTION

### *Questionnaire*

(A) *The Charkha set*

*Question* 1.—For what period of time have you been experimenting with the Ambar Charkha?

*Answer*—7 Months, from September, 1955—March, 1956.

*The period may be divided as follows*:

(a) 3 Months: preliminary experiments with one Charkha, Spinning *Surti* Cotton to 18's and 24's and *Vijaya* to 30's counts. The results indicated large variations in the count, strength and evenness of the yarn spun. (Interim Summary Report Appendix A & B, March 2 1956.)

(b) 1½ Months: Study and improvements in machines and processes. Stabilisation of final operating conditions. (Interim Summary Report Appendix A and B, March 2, 1956).

(c) 1½ Months: Spinning 20's and 12's count yarn from the *Vijaya* and the *Wagad* varieties of cotton respectively, in designed experiments with five sets of machines each set consisting of one Ambar *Belani* and one Ambar Charkha. Weaving these yarns on a handloom.

*Question* 2.—Do you consider the Charkha set a technically sound implement?

*Answer*.— With the machines and the set modified as described in the Interim Summary Report we have been able to spin 12's and 20's count yarns from cotton without difficulty. In the design of the machines no basic principle of spinning has been contravened.

*Question* 3.—Is the mechanism simple or complicated?

*Answer*.—Operators with ordinary intelligence may be able to pick up the technique after an adequate amount of basic training.

*Question* 4.—Is it easy to operate?

*Answer*.—As above.

*Question* 5.—Is it capable of easy repair and replacement of parts that might become worn out?

*Answer*.—Yes, provided a trained person and replacement parts are easily available.

*Question* 6.—Is there any scope for immediate adjustment in the Charkha set, so as to make it a more effective instrument of production?

*Answer*.—Possible.

*Question* 7.—Whether the different tools or machine comprising the Ambar Charkha set are capable of being worked with hand?

*Answer*.—Yes; have been operated by hand without any adverse effect.

*Question* 8.—Can the existing Ambar Charkha be easily adapted for being worked with electricity?

*Answer*.—Special experiments will have to be designed and carried out to test this point.

*Question* 9.—Some of the parts of Ambar Charkha which are in the nature of precision parts—can these be manufactured by ordinary carpenters? Should they be manufactured in several centres or in one or more mechanised workshops, in order to maintain uniformity?

*Answer*.—It is essential that all precision wooden and metal parts are produced to standard specifications, by trained persons and in places recognised for the purpose.

*Question* 10.—What experiments have been conducted by you with the Ambar Charkha (Please give full details).

*Answer*.—Included in our Reply (A). 1 to the original questionnaire.

(B) *Quantitative Production.*

*Question* 1.—How many hanks of yarn can an average adult produce in 8 hours of effective work, *if work is done from carding to spinning as also if work is limited to spinning only.*

*Answer*.—Our present figures based on 12 days production by young trained workers for 20's count yarn (from baled Vijaya Cotton), for 8 hours effective work are:

| Worker No. | Process 1,2 and 3 Carding to Spinning | | | Process 3 only Spinning only | | | Remarks |
|---|---|---|---|---|---|---|---|
| | Min.- Hank | Max. Hank | Av. Hank | Min. Hank | Max. Hank | Av. Hank | |
| 1 . . | 4·2 | 9·2 | 5·9 | 11·4 | 35·6 | 17·4 | *Process* 1: Opening & cleaning (On *Dhunai* Modhia) |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| 2 . . | 3·3 | 7·4 | 4·9 | 7·5 | 21·3 | 13·4 | *Process* 2: Drawing to Roving (On *Belani*) |
| 3 . . | 4·0 | 10·8 | 5·6 | 13·6 | 43·2 | 20·5 | *Process* 3 : Spinning (On Ambar Charkha) |
| 4 . . | 4·0 | 8·7 | 5·4 | 14·0 | 38·1 | 18·8 | |
| 5 . . | 4·9 | 8·3 | 6·2 | 15·4 | 36·4 | 24·2 | |

No continuous production over an extended period of time and on one and the same cotton has been carried out for the present, because during this investigation the main emphasis was laid on quality rather than on the quantity.

*Question* 2.—At what period of time, during an eight-hour-day, would the spinner show signs of fatigue which might lower his production capacity?

*Answer*.—So far our experiments have not been conducted to study the fatigue aspect, specially; however, during the present programme of work, with due intervals of rest, the workers did not show any signs of abnormal fatigues.

*Question* 3.—What intervals of rest would be necessary and at what frequency, to ensure that a spinner is able to maintain a production rate of 8 hanks of yarn in a day of 8 effective working hours?

*Answer*.—At A.T.I.R.A. the worker's time is usually 9-00 A.M. to 5-00 P.M. (8 hours) with a recess period from 1-00 P.M. to 2-00 P.M. Generally the workers have short intervals (about 10 minutes) of either rest or some very light work, on the average every two hours during the total daily working time. The time and job analysis of the five workers engaged at A.T.I.R.A. work out as follows for 12 days production of 20's yarn at 7½ daily working.

| Worker | Percent Time on Belani | | | Percent Time on Charkha | | | Percent Time rest |
|---|---|---|---|---|---|---|---|
| | Process | Adjustment and maintenance | Misc. | Process | Adjustment and maintenance | Misc. | |
| 1 | | | | | | | |
| 2 . | 40·2 | 4·0 | 3·2 | 21·5 | 4·6 | 7·0 | 19·5 |
| 3 . . | 50·5 | 2·5 | 5·7 | 16·5 | 1·0 | 6·7 | 17·1 |
| 4 . . | 44·2 | 4·4 | 3·8 | 20·1 | 3·1 | 6·1 | 18·3 |
| 5 . . | 41·9 | 1·7 | 6·3 | 19·5 | 1·9 | 8·1 | 20·6 |
| Average | 44·2 | 3·1 | 4·8 | 19·4 | 2·6 | 7·0 | 18·9 |

*Worker 1 was assigned supervision duties.

*Question* 4.—Given the required intervals of rest, would an average adult be able to continuously produce 8 hanks of yarn per eight-hour day if he works on the Charkha for months together taking into account fatigue, psychological and other factors?

*Answer*.—Only long term field experiments with no change during the period in the cotton or counts of yarn spun, could decide this point.

*Question* 5.—What is the period of training that an average adult would require to enable him to produce 8 hanks of yarn in a day of 8 effective working hours?

*Answer*.—Not known since most of the workers at A.T.I.R.A. had a preliminary training in the Ambar Charkha Spinning.

*Question* 6.—Would the spinner require any further training by way of refresher course? If so, for what period?

*Answer*.—Yes, it would be helpful, for a period of at least 2 weeks.

(C) *Quality of Cotton.*

*Question* 1.—Have the experiments in your institution been conducted with high grade cotton or varying grades of cotton?

*Answer*.—We have worked with the trade varieties:

(a) *Vijaya* and (b) *Wagad*.

*Question* 2.—What counts of yarn are produced with varying grades of cotton?

*Answer*.—We have spun:—

12's count yarn from *Wagad* cotton—and 20's from *Vijaya*.

*Question* 3.—What is the out-put of yarn, if average qualities cotton which are available in bulk, are used by the spinner?

*Answer*.—Figures given in Reply (B) 1.

*Question* 4.—Is it necessary to fix any particular variety of cotton for producing different counts of yarn?

*Answer*.—Yes.

(D) *Qualitative Production*

*Question* 1.—Is the yarn produced, clean and smooth?

*Answer*.—Appearance pictures and evenness records of 20's yarn indicate a fairly clear and smooth material.

*Question* 2.—What are the count variations, in a unit of one hank of yarn?

*Answer*.—The Coefficient of Variation for the 20's count Vijaya yarn spun at A.T.I.R.A. showed a value of 7 per cent. (in terms of percentage standard deviation of the mean.)

*Question* 3.—What is the tensile strength of the yarn?

*Answer*.—For the same yarn the average Lea strength noted was 84·6 lbs. for an average count of 19·6.

*Question* 4.—Is the yarn produced, capable of passing through the reeds, during weaving, without many breakages, because of the variations in the counts?

*Answer.*—The yarn was found to pass through the reeds during weaving without many breakages.

*Question* 5.—What should be the maximum count variation, in order to reduce breakages to the minimum?

*Answer.*—With the variations mentioned above the yarn does not have more than the normal number of breakages.

*Question* 6.—Whether the Ambar Charkha set is capable of producing yarn of coarse, medium and fine counts?

*Answer.*—So far our experience is confined to yarns of 20's and 12's counts only.

*Question* 7.—What adjustments, if any, are required for producing yarn of different counts?

*Answer.*—The necessary adjustments have been indicated in the Interim Report and in the Charkha Machine Drawings.

*Question* 8.—What actual count-ranges, is the Ambar Charkha set capable of producing? For example, 6's to 18's, 18's to 32's, 32's to 48's etc.

*Answer.*—Reply (D) 6.

*Question* 9.—How does the strength and count Variation of Ambar yarn compare with the average reeled yarn of identical counts?

*Answer.*—These tests have now been reported in the supplement.

*Question* 10.—What is the variation in tensile strength of yarn produced?

*Answer.*—The Coefficient of Variation for the lea tensile strength for the tests made, was 12·6, in terms of percentage Standard deviation of the mean. (*Vide* Interim Summary Report Appendix B, Table II).

*Question* 11.—What are the turns per inch put in and the variation of such turns per inch in the yarn?

*Answer.*—Turns per inch on the Ambar Yarn as spun on five Charkhas and their variations (Coefficient of Variation) are shown in the Table below:

| Yarn | No. of tests | Average Turns/ inch. | Coefficient variation in Turns/ inch. |
|---|---|---|---|
| Charkha I . . . . . . . . . . | 34 | 21·1 | 22·18 |
| Charkha II . . . . . . . . . . | 45 | 18·8 | 18·60 |
| Charkha III . . . . . . . . . . | 45 | 18·9 | 25·18 |
| Charkha IV . . . . . . . . . . | 45 | 19·3 | 20·72 |
| Charkha V . . . . . . . . . . | 45 | 18·6 | 16·86 |

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*Question* 12.—What is the evenness of the yarn produced?

*Answer.*—Unevenness figures for the five samples of Ambar Yarn as determined on a Fielden Walker Instrument are shown in the Table below:—

| Yarn | No. of tests | Percent mean deviation from Normal | |
|---|---|---|---|
| | | At Low Speed | At High Speed |
| Charkha I | 30 | 14·70 | 16·47 |
| Charkha II | 31 | 14·38 | 16·30 |
| Charkha III | 31 | 15·21 | 16·24 |
| Charkha IV | 31 | 14·30 | 16·21 |
| Charkha V | 38 | 14·24 | 16·70 |

*Question* 13.—How does the Ambar Charkha yarn compare with mill (reeled) yarn of identical count in regard to evenness of the yarn spun, its cleanliness, neppiness, variation in the tensile strength, regularity of the flow of twist and other relevant matters?

*Answer.*—Comparative figures for the 20's Ambar Yarns and one sample of Mill Reeling yarn of the corresponding count purchased locally are shown in the table below. Other samples of 20's mill reeling yarns supplied by the Textile Commissioner's Office, Ahmedabad, proved to be inferior. Details of all the tests will be given in the full report for the 20's yarn, which is under preparation.

| Yarn Property | Ambar Yarn * | Reeling Yarn ** |
|---|---|---|
| (1) Unevenness | | |
| (a) Low Speed | 14·56 | 14·13 |
| (b) High Speed | 16·38 | 15·90 |
| (2) Variation in Strength (Coefficient of Variation) | 12·60 | 11·23 |
| (3) Twist regularity (Coefficient of variation) | 20·71 | 18·83 |
| (4) Cleanliness and neppiness | Comparable to reeling yarn | .. |

*Average of yarns produced on five Charks.

**Sample purchased locally.

## (E) *Weaving*

*Question* 1.—Is the yarn of sufficient strength, to eliminate difficulty in sizing and weaving?

*Answer.*—The 20's and 12's yarns have caused no special difficulty.

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*Question* 2.—Whether it is capable of being woven, more or less, as easily as the average reeled yarn available to handloom weavers.

*Answer*.—Yes.

*Question* 3.—In the background of the weaving-tests conducted in your institution and in the background of the quality of yarn produced by the Ambar Charkha, what textures of cloth, of specified reeds and picks would you consider capable of being woven by handloom weavers?

*Answer*.—The cloth produced at A.T.I.R.A. from 20's yarn has 46/46 Reeds & Picks per inch. Our experience at present is restricted to this texture only. Cloth tests are still to be completed.

### (F) *Wastage*

*Question* 1.—What is the percentage of wastage in spinning?

*Answer*.—With the *Vijaya* Cotton used for Spinning 20's count yarn, the average total waste, most of which was taken out at *Dhunai Modhia* and *Belani*, worked out as 13·1 percent. A part of this waste is avoided after good practice, under favourable conditions.

*Question* 2.—How does this compare with wastage in producing mill-yarn of identical counts?

*Answer*.—Compares well.

*Question* 3.—What is the percentage of wastage in weaving?

*Question* 4.—How does this compare with wastage in weaving with reeled yarn?

*Answers* 3 & 4.—Warping and Weft filling waste figures obtained for the 20's count Ambar and Reeling yarns in two sets of experiments for a handloom installed at A.T.I.R.A. are:—

*Warping and Weft Filling Waste Percentage.*

| Yarn | Set I | Set II |
|---|---|---|
| 20's Ambar Yarn . . . . . . . . . . . . . | 0·75 | 0·59 |
| 20's Reeling Yarn . . . . . . . . . . . . . | 0·78 | 0·80 |

As the number of observations are very limited no significance can be attached to the differences observed between the Ambar and the Reeling Yarns. Figures are not available for any wastage made during the actual weaving operation on the handloom.

### (G) *Miscellaneous*

*Question* 1.—What are the reactions of the Ambar yarn to bleaching and dyeing and how these compare with the reactions of mill (reeled) yarn to similar processes?

*Answer.*—So far no work has been done on bleaching and dyeing of the Ambar yarn or the cloth made from it at A.T.I.R.A. There is no reason, however, to believe that any difference between the Ambar yarn and the reeled mill yarn in this respect would be noticed.

## II

## REPLIES GIVEN BY THE DIRECTOR, TECHNOLOGICAL LABORATORY, INDIAN CENTRAL COTTON COMMITTEE, BOMBAY, TO THE QUESTIONNAIRE ISSUED BY THE AMBAR-CHARKHA COMMITTEE.

### *Replies to Questionnaire.*

### (A) *The Charkha set.*

*Q.* 1.— For what period of time have you been experimenting with the Ambar Charkha?

*Ans.*—Experiments on Ambar Charkha were carried on for four months at the Technological Laboratory, Matunga. Preliminary experiments had, however, commenced two months ealier.

*Q.* 2.—Do you consider the Charkha set a technically sound implement?

*Q.* 3.—Is the machanism simple or complicated?

*Q.* 4.—Is it easy to operate?

*Ans. to Q.* 2, *Q.* 3. *and Q.* 4.—The Ambar Charkha consists of (i) *Dhunai Modhia,* (ii) Ambar *Belni* (sliver preparer) and (iii) Ambar Charkha (a simplified ring frame with 4 spindles). The first two devices are meant to clean the cotton and prepare a suitable roving for feeding the Ambar Charkha. Although these have been devised to be as simple as possible, further improvements seem necessary. For example, *Dhunai Modhia* ruptures the fibres, as the experiments at the Laboratory have shown; it should therefore, be modified or discarded. The Ambar *Belni* (sliver preparer) is a useful device, but it is here that the foundations for the irregularity or unevenness of yarn are laid. In the present processing, the lap is made by hand, the pattas are crimpled, *i.e.* 16 to 32 feet are compressed in the palm of the left hand to a few inches, and then spread out again for doubling and further passages through the *Belni.* The spring and string-weighting on the two pairs of rollers are likely to produce slippage or stickiness of the sliver; the insertion of the roving twist appears to be somewhat irregular. Preparation of fairly even roving is almost an *art* depending to some extent on the personal skill of the operator. The present model of the Ambar Charkha (ring frame with 4 spindles), which does the actual spinning, has no smooth movement of its parts; this has to be improved by redesigning the various parts and minimising friction, wherever possible.

*Q.* 5.—Is it capable of easy repair and replacement of parts that might become worn out?

*Ans.*—Yes; with some training.

*Q.* 6.—Is there any scope for immediate adjustment in the Charkha set, so as to make it a more effective instrument of production?

*Ans.*—It might be possible to make it a more effective instrument of production, if the set is re-designed; but no definite answer can be given unless experiments are conducted in this direction.

*Q.* 7.—Whether the different tools or machines comprising the Ambar Charkha set are capable of being worked with hand?

*Ans.*—Yes.

*Q.* 8.—Can the existing Ambar Charkha be easily adapted for being worked with electricity?

*Ans.*—Yes; with changes in the machanical equipment, it might be possible.

*Q.* 9.—Some of the parts of Ambar Charkha which are in the nature of precision parts—can these be manufactured by ordinary carpenters? Should they be manufactured in several centres or in one or more mechanised workshops, in order to maintain uniformity?

*Ans.*—The precision parts of this unit are mostly made of iron, an ordinary carpenter can possibly make the wooden parts. The precision parts should preferably be manufactured at a central mechanised workshop where highly-skilled technicians are available.

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(*B*) *Quantitative Production.*

*Question* 1.—How many hanks of yarn can an average adult produce in 8 hours of effective work?

*Ans.*—It all depends whether an adult is engaged on spinning on the Ambar Charkha (ring frame) alone or he should attend to the preparatory processes as well; further, it also depends on the counts spun and the quality of the cotton used. In the investigation carried out at the Laboratory, clean lint belonging to the Standard Indian Cottons, grown at the Government Experimental Stations situated at various places in the Indian Union was taken, because the Laboratory results for these cottons were available for comparative purposes. These cottons were not pressed into a bale. If, however, commercial baled cottons which are available in the market are taken, the amount of dirt and trash would, in all probability, be more since carding in the Ambar unit cannot be so good as it would be in a mill, and more leaf-bits, seed-coat bits, etc. might be present in the Charkha roving. This would produce more end-breakages in spinning and lower the production of yarn to some extent. The results obtained in the experiments carried out at the Laboratory are given below:—

*Average production of yarn in hanks for 8 hours with 4 spindles.*

| | 10s | 14s | 20s | 30s | 40s | 50s |
|---|---|---|---|---|---|---|
| (a) Charkha alone. . | 14·0 | 12·4 | 16·4 | 12·0 | 17·2 | 12·4 |
| (b) Based on total time taken upto spindle point including preparatory processes, but *excluding* time taken for repairs and changes for counts, cotton, etc. . | 3·6 | 4·2 | 5·2 | 4·4 | 4·4 | 4·0 |
| (c) Based on total time taken including preparatory processes, spinning and reeling, but *excluding* time taken for repairs and changes for counts, cotton, etc. . | 3·2 | 3·8 | 4·4 | 4·0 | 4·0 | 3·6 |
| (d) Based on total time *including* time taken for preparatory processes and also *including* time taken for repairs and changes for counts, cotton, etc. . . | 2·3 | 3·0 | 4·0 | 3·1 | 3·2 | 3·1 |

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Regarding item (d), it may be remarked that this item is given because repairs and changes for counts, cotton, etc. might be considered as necessary work, which would not occur in the normal working of the Charkha.

*Question* 2.—At what period of time, during an eight-hour-day, would the spinner show signs of fatigue which might lower his production capacity?

*Answer.*—If an adult is working on the Ambar Charkha alone, it is likely he might show signs or fatigue after two hours.

*Question* 3.—What intervals or rest would be necessary and at what frequency, to ensure that a spinner is able to maintain a production rate of 8 hanks of yarn in a day of 8 effective working hours?

*Answer.*—It has not been possible even for an expert worker like Shri Gourhari Das to spin 8 hanks of yarn in a day of 8 working hours, for converting the lint to yarn. The figures given under Q. 1.

show that it may not be possible to produce more than 4.4 hanks of yarn for 20s.

*Question* 4.—Given the required intervals of rest, would an average adult be able to continuously produce 8 hanks of yarn per eight-hour-day, if he works on the Charkha for months together, taking into account fatigue, psychological and other factors?

*Ans.*—It does not seem possible to produce 8 hanks of yarn per 8-hour day, even if sufficient breaks are given for the worker to rest. As stated above (item 4), an out-put of 4 hanks per day of 8 working hours (from lint to yarn) is possible.

*Question* 5.—What is the period of training that an average adult would require to enable him to produce 8 hanks of yarn in a day of 8 effective working hours?

*Answer.*—The person who worked at the Laboratory had been trained at Wardha for a period extending over some months. Even there he was not able to produce 8 hanks per day of 8 working hours. It seems, therefore, that the period of training beyond a certain minimum, is quite immaterial.

*Question* 6.—Would the spinner require any further training by way of refresher course? If so for what period?

*Answer.*—Cannot answer this question.

*Question* 7.—Answered under (D) 9.

(C) *Quality of cotton.*

*Question* 1.—Have the experiments in your institution been conducted with high grade cotton or varying grades of cotton?

*Answer.*—It is presumed that by 'grade' it is meant staple characteristics, such as staple-length, fineness, uniformity of staple, strength, feel and so on; though grade generally includes colour, cleanliness, amount of trash and dirt, ginning preparation and so on. If the above presumption is correct, it may be stated that the experiments were conducted with different varieties of cotton, possessing wide range of fibre-length and fineness, the mean fibre-length ranging from 0.70 inch to 0.96 inch.

*Question* 2.—What counts of yarn are produced with varying grades of cotton?

*Answer.*—10s-14s and 20s-30s were produced from machine-ginned lint and 40s-50s were spun from lint obtained by hand-ginning the selected seed-cotton (kapas), the former from short stapled cottons and the latter from medium and long stapled cottons.

*Question* 3.—What is the out-put of yarn, if average qualities cottons which are available in bulk, are used by the spinner?

*Answer.*—This question is already answered under (B) 1.

*Question* 4.—Is it necessary to fix any particular variety of cotton for producing different counts of yarn?

*Answer.*—It might be profitable to spin an economic count from a given variety of cotton.

(D) *Qualitative Production.*

*Question* 1.—Is the yarn produced clean and smooth?

*Answer.*—The yarn produced on the Ambar Charkha was fairly clean because it was produced from clean cotton, but a little overtwisted, which makes it somewhat snarly and rough in lower counts.

*Question* 2.—What are the count variations, in a unit of one hank of yarn?

*Answer.*—The count variation is generally within 6 per cent within a hank.

*Question* 3.—What is the tensile strength of the yarn?

*Answer.*—Assuming that tensile strength, in this context, means lea strength, the experimental values are given in the table attached, herewith.

*Question* 4.—Is the yarn produced, capable of passing through the reeds, during weaving, without many breakages, because of the variations in the counts?

*Answer.*—Yes; it would pass through the reeds during weaving.

*Question* 5.—What should be the maximum count variation, in order to reduce breakages to the minimum?

*Answer.*—Generally, it should not exceed 10 per cent. of the nominal count.

*Question* 6.—Whether the Ambar Charkha set is capable of producing yarn of coarse, medium and fine counts?

*Answer.*—Yes; coarse and medium counts can be spun from machineginned lint , but if higher counts are to be spun from the same cotton it appears that the lint obtained from hand-ginning from selected kapas would be required.

*Question* 7.—What adjustments, if any, are required for producing yarn of different counts?

*Answer.*—Suitable drafts, speeds, twists have to be adjusted.

*Question* 8.—What actual count-ranges, is the Ambar Charkha set capable of producing for example, 6s to 18s, 18s to 32s, 32s. to 48s, etc.

*Answer.*—The counts spun on the Ambar Charkha in the Laboratory experiments are within these ranges.

*Question* 9.—How does the strength and count variation of Ambar yarn compare with the average reeled yarn of identical counts?

*Answer.*—No information is available on the standards for reeled yarn, having regard to the mixing used in the mills.

(E) *Weaving.*

*Question* 1.
*Question* 2. No experiments have been conducted at this Laboratory.
*Question* 3.

## (F) *Wastage.*

*Question* 1.—What is the percentage of waste in spinning?

*Answer.*—In the experiments carried out at the Laboratory, the lint was opened by beating on the jally, in which process, some dirt and trash were removed. The lint was then weighed and the wastage obtained based on this lint weight, varied from 6·2 per cent. to 26·8 per cent. depending upon the cotton and the treatment.

*Question* 2.—How does this compare with wastage in producing mill yarn of identical counts?

*Answers.*—The wastage in a mill is likely to be slightly higher than that obtained for the Charkha, because in the latter the blow-room loss and card loss do not occur to the same extent as in a mill.

*Question* 3.—What is the percentage of wastage in weaving?

*Question* 4.—How does this compare with waste in weaving with reeled yarn?

*Answer.*—Not investigated.

(Sd/-)

DIRECTOR,
Technological Laboratory.

*Dated the 17th March* 1956.

[Ref: Answer to Question (D) 3.]

TABLE.—*Lea strength (lbs.) values for yarns spun on Ambar Charkha.*

| Cotton | Lea strength (lbs.) for | | | | | |
|---|---|---|---|---|---|---|
| | 10s | 14s | 20s | 30s | 40s | 50s* |
| Matheo Local | 68·9 | 34·9 | .. | .. | .. | .. |
| 35/1 | 97·1 | 57·0 | .. | .. | .. | .. |
| Gaorani 6 | .. | .. | 75·2 | 35·7 | .. | .. |
| Vijay | .. | .. | 79·1 | 43·4 | 34·4 | .. |
| H. 420 | .. | .. | 41·4 | 30·1 | .. | .. |
| Jarila | .. | .. | 60·2 | 39·1 | .. | .. |
| Laxmi | .. | .. | 76·0 | 42·1 | 40·8 | .. |
| Co. 2 | .. | .. | 58·7 | 32·0 | .. | .. |
| K.2 | .. | .. | 63·4 | 35·6 | .. | .. |
| Buri 0394 | .. | .. | .. | 28·5 | 31·5 | 27 3 |
| M.A. 5 | .. | .. | .. | 19·1 | 31·1 | 22·4 |
| M.C.U. 1 | .. | .. | .. | 37·6 | 34·8 | 29 3 |

*Starting material was *Kapas* in these two counts.

## III

## *Replies of the Principal, Government Central Textile Institute, Kanpur, to the Questionnaire on Ambar Charkha issued by the Ambar Charkha Committee, Ministry of Production, Government of India.*

| QUESTIONS | REPLIES |
|---|---|
| (A) *The Charkha Set.* | |
| (1) For what period of time have you been experimenting with the Ambar Charkha ? | Three weeks. |
| (2) Do you consider the charkha set a technically sound implement? | It is a technically sound implement for the purpose it is meant. |
| (3) Is the mechanism simple or complicated ? | Mechanism is simple. |
| (4) Is it easy to operate ? . . | It is easy to operate. |
| (5) Is it capable of easy repair and replacement of parts that might become worn out ? | Replacement of parts can be done easily. Repairs can be done by trained carpenters. |
| (6) Is there any scope for immediate adjustment in the charkha set, so as to make it a more effective instrument of production ? | It is under examination. |
| (7) Whether the different tools or machine comprising the Ambar charkha set are capable of being worked with hand ? | They are capable of being worked with hand. |
| (8) Can the existing Ambar charkha be easily adapted for being worked with electricity ? | It would require substantial modifications to adapt it for being worked with electricity |
| (9) Some of the parts of Ambar charkha which are in the nature of precision parts can these be manufactured by ordinary carpenters? Should they be manufactured in several centres or in one or more mechanised workshops, in order to maintain uniformity ? | The parts of Ambar charkha which are in the nature of precision parts are made of iron and steel. They cannot be manufactured by ordinary carpenters. They may better be got manufactured in standard workshops in order to maintain uniformity. |
| (B) *Quantitative Production.* | |
| (1) How many hanks of yarn can an average adult produce in 8 hours of effective work ? | An average adult can produce in 8 hours of effective work 6 to 8 hanks. |
| (2) At what period of time, during an eight hours day, would the spinner show signs of fatigue which might lower his production capacity | The conditions are quite different in cottage industries and the worker takes rest according to his convenience. However rest at the end of every two hours for about 15 minutes to half an hour seems to be desirable. During summer, work is done in the rural areas in morning and evening shifts. This holds good in case of Ambar charkha as well. Between these two shift there is generally an interval of 3 hours. |
| (3) What intervals of rest would be necessary and at what frequency? to ensure that a spinner is able to maintain a production rate of 8 hanks of yarn in a day of 8 effective working hours ? | |
| (4) Given the required intervals of rest would an average adult be able to continuously produce 8 hanks of yarn per eight hour day if he works on the charkha for months together taking into account fatigue, psychological and other factors ? | He would be able to produce 6 to 8 hanks according to his capacity. |

| QUESTIONS | REPLIES |
|---|---|
| (5) What is the period of training that an average adult would require to enable him to produce 8 hanks of yarn in a day of 8 effective working hours? | The period of training will depend on the capacity of the man; but on an average it is suggested that the period may be of 3 months to give the trainee thorough practice and acquire speed and efficiency. |
| (6) Would the spinner require any further training by way of refresher course? If so, for what period? | No refresher course seems to be necessary. |
| (C) *Quality of Cotton.* | |
| (1) Have the experiments in your institution been conducted with high grade cotton or varying grades of cotton? | No. Only one or two varieties were worked. |
| (2) What counts of yarn are produced with varying grades of cotton? | |
| (3) What is the out put of yarn, if average qualities cotton which are available in bulk, are used by the spinner? | *Vijai* and *jarila* cottons were used and output was 6 to 8 hanks. Range of counts was 14 to 20. |
| (4) Is it necessary to fix any particular variety of cotton for producing different counts of yarn? | This has not yet been tried. |
| (D) *Qualitative Production.* | |
| (1) Is the yarn produced, clean and smooth? | This is still under observation. |
| (2) What are the count variations, in a unit of one hank of yarn? | |
| (3) What is the tensile strength of the yarn? | Sufficient tests have not been performed to give definite opinion. |
| (4) Is the yarn produced capable of passing through the reeds, during weaving, without many breakages, because of the variations in the counts? | The yarn produced is capable of passing through the reeds during weaving but there are breakages because of the variations but in the counts. Sufficient data has not yet been collected. |
| (5) What should be the maximum count variation, in order to reduce breakages to the minimum? | 2 to 3 counts up and down. |
| (6) Whether the Ambar charkha set is capable of producing yarn of course, medium and fine counts? | Only medium counts of yarn was produced during the short period the charkha was tested. |
| (7) What adjustments, if any, arerequired for producing yarn of different counts? | This has not yet been tried. |
| (8) What actual count-ranges, is the Ambar charkha set capable of producing? For example, 6's to 18's, 18's to 32's, 32's to 48's etc. | In this Institute only 14 to 20 counts have been produced during the few days that the charkha has been tried. |
| (9) How does the strength and count variation of Ambar yarn compare with the average reeled yarn of identical counts? | Not yet tried. |

| QUESTIONS | REPLIES |
|---|---|
| (E) *Weaving.* | |
| (1) Is the yarn of sufficient strength, to eliminate, difficulty in sizing and weaving. | Not yet tried. |
| (2) Whether it is capable of being woven more or less, as easily as the average reeled yarn available to handloom weavers. | |
| (3) In the back ground of the weaving tests conducted in your institution and in the back ground of the quality of yarn produced by the Ambar charkha what textures of cloth, of specified reeds and picks would you consider capable of being woven by handloom weavers. | |
| (F) *Wastage.* | |
| (1) What is the percentage of wastage in spinning ? | 6 ¼ to 12 ½%. |
| (2) How does this compare with wastage in producing mill yarn of identical counts ? | In mill yarn the wastage is 12 to 18 %. This will vary from cotton to cotton and mill to mill. |
| (3) What is the percentage of wastage in weaving ? | Not yet tried. |
| (4) How does this compare with wastage in weaving with reeled yarn ? | |

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Sd/- J.N. SINGH,
PRINCIPAL,
*Govt. Central Textile Institute*
KANPUR.

*Dated May* 19, 1956.

## APPENDIX V

### Replies to the Questionnaire on economic Aspects

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# APPENDIX V

## REPLIES TO THE QUESTIONNAIRE ON ECONOMIC ASPECTS:

## I

## DIRECTOR OF INDUSTRIES WEST BENGAL

### REPLIES TO THE QUESTIONNAIRE ISSUED BY THE AMBAR CHARKHA COMMITTEE ON THE ECONOMIC ASPECTS OF THE AMBAR CHARKHA.

(A) *Cost of production of yarn.*

1. Raw materials—

Average price of indigenous cotton per candy of 800 lbs. should be taken as Rs. 750/.

2. In the agricultural peak period, the agricultural wages rise upto Rs. 1/8/- per day while in the slack season wages come down to -/8/- to -/10/- per day and some times the labourers have to sit idle. So on an average the reasonable wages for the Ambar Charkha Spinners should be at least -/12/- per day of 8 hours' work ensuring work for at least 300 days in a year earning Rs. 275 per annum.

3. Overheads—

The overheads may be calculated @ 6¼ per cent. over the cost of production including cost of establishment, freight and other charges.

4. Handling charges—

(i) It is not necessary to include separate charges for handling in addition to the overheads.

(ii) In case the yarn spun is not locally consumed, handling charges to the extent of 1¼% may be given out of the overhead charges.

5. Wastage—

Percentage of cost for wastage should not exceed 10% which may be added to the cost of production.

(B) *Subsidy on distribution of yarn—*

| | | 20's |
|---|---|---|
| 1. Approximate total cost of Production per lb. of yarn. | (i) Raw cotton . | -/13/6 |
| | (ii) Wastage . | -/ 1/6 |
| | (iii) Spinning and carding charges .<br>(@ -/12/- a day) | 1/14/- |
| | | Rs. 2/13/- |
| | Overheads 6¼% | -/ 2/9 |
| | Total | 2-15-9 |

| 2. Cost of mill yarn 20's per lb. | Cost of Amber yarn 20's per lb. |
|---|---|
| Rs. 1/10/6 | Rs. 2/15/9 |

The difference is Re. 1/5/3 per lb.

3. The entire difference need be subsidised at the initial stage by the Government.

4. In order to make Ambar yarn competitive, *vis-a-vis* mill yarn of comparable counts, I would recommend the placing of a ban on production by mills on count range below 20's. The mills should not be allowed to produce yarn beyond that range.

5. It is a fact that this procedure of putting a ban on mills on production of certain counts, will create a monopoly for the Ambar Charkha, but it will not affect the consumers to a very large extent. The introduction of Ambar Charkha is meant mainly to solve the unemployment and under-employment problem of the country especially in the rural areas. This means creation of national wealth by offering a means of production to all the under-employed. If a subsidy is to be given to make Ambar Yarn competitive *vis-a-vis* mill yarn, taxation will have to be introduced to meet the subsidy. If the present method of putting a cess on mill made cloth is expanded, that will also raise the price of mill made cloth and the consumers will have to pay it. But if a restriction on mill production is introduced, the consumers will find it more convenient to get themselves also employed in the production of yarn themselves; because it is the rural population who use coarser cloth below 20's. If they do not find coarse mill cloth in the market, they will automatically take to spinning and will become self employed. So the ultimate consumer of cloth manufactured out of yarn below 20's will be benefited by this method.

(C) *Subsidy on the distribution of Ambar Charkha*—

(i) Cost of production.—We do not manufacture Ambar Charkha.

(ii) The Charkhas to be made available to the unemployed and under employed village spinners should be supplied at a subsidised rate.

(iii) In my opinion 75% of the cost should be given as grant and 25% to be realised on hire purchase system.

(Sd/.)
Director of Industries,
West Bengal.

## II

## DIRECTOR OF INDUSTRIES, PUNJAB

### REPLIES TO THE QUESTIONAIRE ISSUED BY THE AMBER CHARKHA COMMITTEE

(A) *Cost of production of yarn.*

(I) *Raw Material.*

The average price of cotton *i.e.* Bengal Desi Cotton Rs. 55 to Rs. 60/- per maund (about Rs. 585/- per candy) for calculating the cost of production of yarn.

(2) Rupee one per day. The average Agricultural wage for unskilled made workers is from Re. 1/8/- to Rs. 2/- per day.

(3) *Overheads.*

6¼% on the production of yarn and 20 per cent (including the above 6¼ per cent) on the production of cloth.

(4) *Handling.*

(i) Yes.

(ii) About 5 per cent as direct charges.

(5) *Wastage.*

20 per cent.

(B) *Subsidy on the distribution of yarn.*

(1) Assuming that a spinner can spin from 8 to 10 hanks per day. Rs. 3/- to Rs. 3/4/- per lb. will be the cost of yarn.

(2) Mill reeled yarn 16's @ Rs. 1/10/- per lb., 20's @ Rs. 2/- per lb.
Ambar yarn average Rs. 3/- to Rs. 3/4/- per lb.
Difference. Rs. 1/6/- to Rs. 1/10/- per lb.

(3) 40 per cent of the price of yarn.

(4) There should be a ban on the sale of mill yarn upto 20's and cloth made out of yarn upto 20's inside the Union of India *i.e.* such yarn and cloth should be used for export purposes only.

(5) No question of monopoly arises when it is to be in favour of the entire nation. At a modest computation, there may be about 4 million spinners in the Union of India. Then there may be competition between individual spinners. The object is to aviod most unequal competition between handspinners and the mill spinners; for most common counts, *i.e.* below 20's.

(Sd/.)

Director of Industries,

Punjab.

## III

## DIRECTOR OF INDUSTRIES, MADRAS

*No.* DRDVT/*JV.*-2/56, *dated* 14*th May* 1956.

*Subject*: Questionnaire on Ambar Charka.

Sir,

*Reference*: Your letter No. 4ACC/56, dated 1st May 1956.

I furnish below the answer to the questionnaire sent with your above letter.

A. (i) Cost of raw materials (cotton): The price of cotton is not known to this Department but the price of cotton to be taken for calculation of production cost of yarn should be the price of unginned cotton.

(2) A wage of Re. 0-12-0 per day of 8 hours may be considered to be reasonable wage for the spinners.

(3) An overhead charge of Re. 0-2-0 per day may be added to the cost of production to cover repairs and renewals to the spinning implement.

(4) No separate handling charges are necessary. (purchase of raw materials and sale of finished products to be organised through co-operatives).

(5) A wastage of about 8 per cent. may be assumed when calculating the output of yarn from a given quantity of cotton.

B. Particulars are not available with this Department, to answer this part.

C. (1) Total estimated cost of production of the spinning wheel, sliver making machine, carding machine and hand operated ginning machine is Rs. 100.

(2) The Charka should be supplied to spinners at subsidized rate.

(3) 50 per cent. of the cost may be paid as an outright grant.

(Sd.) P. MUTHUSWAMY,
for Director of Industries & Commerce.
forwarded/by order.
(Sd.) Superintendent.

## IV

## REPLIES OF THE DIRECTOR OF INDUSTRIES, VINDHYA PRADESH TO THE QUESTIONNAIRE ON ECONOMIC ASPECTS.

(A) *Cost of Production of Yarn.*

(1) *Raw material.*

The average price of cotton per candy (5 mds.) should be taken as Rs. 350.

(2) Re. 1 per day.

(3) 15 per cent.

(4) (i) No.
    (ii) Does not arise.

(5) 5 per cent.

(B) *Subsidy on distribution of yarn.*

(1) Rs. 3-2-0 to Rs. 3-12-0 per lb.

(2) From As. 0-4-0 to As. 0-14-0 per lb.

(3) 50 per cent.

(4) An outright subsidy may be given to start with. The question of placing a ban on production by mills could be taken up later when the production of yarn through Ambar Charkha has gone up considerably so as to meet country's demand.

(5) Does not arise.

(Sd.) S. JAIN,
Director of Industries.

## V

### LETTER No. ECR/AC/56, DATED 18-5-56 FROM THE KHADI BOARD. (REPLIES TO THE QUESTIONNAIRE ON ECONOMIC ASPECTS).

SUBJECT:—*Questionnaire on the Economic Aspects of the Ambar Charkha.*

Will you please refer to your circular letters No. 4-A.C.C./56(B), dated May 1 and May 10, 1956? I am to furnish replies to the questions posed in those letters as follows:—

A(1) *Raw material.*—The average price of raw cotton for the manufacture of yarn of 16's should be Rs. 600 per candy and of 20's Rs. 700 per candy. These are, however, the barest minimum today as price fluctuations during the last few months have been very wide.

(2) The Board is of the view that a daily wage of 12 annas to the spinner is reasonable. Though the all-India average agricultural wage varies from occupation to occupation and ranges between 14 annas to Rs. 1-2-0 per day, work available to agricultural labour over the major portion of country-side is only for a very limited period. Consequently, if it is spread over the entire year of 300 days, the all-India average wage, computed by the Agricultural Labour Enquiry Committee, will be seen to be lower than the wage proposed by the Board for the spinner on the Ambar Charkha.

(3) *Overheads.*—The overhead charges on the present traditional khadi are computed at 18¾ per cent.; these are inclusive of establishment, transport, insurance etc. In the Ambar Charkha scheme, the Board expects a progressive reduction in the overhead costs from the present 18¾ per cent. to 12½ per cent. By what stages this reduction will be effected and by how much are points that cannot now be indicated.

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(4) *Handling charges.*—(i) The Board contemplates a thorough revision of its earlier Ambar Charkha programme and directly undertaking the manufacture of cloth from yarn produced on the Ambar Charkha. The question of handling charges or its appropriate percentage of total costs may not, therefore, arise.

(ii) Does not arise.

(5) *Wastage.*—The Board's Ambar Charkha programme allows for 12½ per cent. of the cost of raw cotton for wastage. The details, set out in the enclosed table, show the wide variations in the percentage of wastage of raw cotton in carding, slivering and spinning. The Board considers 12½ per cent. allowance, on a national average, for calculating the price of yarn as reasonable.

B. In view of the answer to question A(4), these questions do not arise.

Subsidy: A firm answer to the additional question forwarded with your letter No. 4-A.C.C./56 of May 10, cannot be given till after the Board's meeting at Conjeevaram. The figures furnished below are tentative. As several months of the first year of the Plan period have elapsed without any preparation for the implementation of the Board's Ambar Charkha programme and only four effective years are available, the progression in production may have to be revised as shown in the table below. The Board believes that 25 per cent. of the annual output of cloth with Ambar yarn may be consumed by the spinners, weavers and their respective families. Consequently, only 75 per cent. of the annual output of cloth may have to be marketed either locally, regionally or through special shops. The subsidy on cloth is calculated at the rate of 4 annas in the rupee, and the cost per yard of cloth is the same as in the Board's latest Ambar Charkha Programme. The subsidy at 4 annas in the rupee represents the payment of an additional subsidy of 2 annas in the rupee, as all handloom cloth today enjoys a 2 anna rebate in the rupee.

Yours sincerely,
(Sd.) J. D. SUNDRAM.

## REGION-WISE ANALYSIS OF WASTAGE

| Region | Quality of cotton supplied | Count range | Percentage of wastage |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Bengal | Jarilla | 15—20 | 11·08 |
| 2. Andhra | Red cotton | 9—20 | 13·53 |
| 3. Karnatak | Jaydhar | 12—20 | 18·50 |
| 4. Maharashtra | 197/3 | 13—20 | 12·07 |
| 5. Kerala | Jarilla & Karanganni | 11—20 | 11·63 |
| 6. Tamil Nad | Ukkanta & Karanganni | 13—24 | 9·80 |
| 7. Utkal | Jarilla | 12—20 | 21·68 |
| 8. U. P. | Jarilla | 14—16 | 7·45 |
| 9. Punjab | Surti | 12—18 | 15·99 |
| 10. Bihar | Navsari | 12—25 | 11·66 |
| 11. Madhya Bharat | 197/3 | 13—16 | 6·19 |
| 12. Hyderabad | Navasari | 12—30 | 6·31 |
| 13. Saurashtra | Vijay | 11—20 | 14·60 |

*Source* : Data on Spinning Competitions on the Ambar Charkha conducted at the various *Parishramalayas* after April 13, 1956.

## *Tentative Estimate of Production of Ambar Khadi.*

| Items | Unit | 1956-57 | 1957-58 | 1958-59 | 1959-60 | 1960-61 | Total |
|---|---|---|---|---|---|---|---|
| | Mn. Yds. | | | | | | |
| 1. Production of Khadi | „ | 25 | 175 | 500 | 800 | 1,000 | 2,500 |
| 2. *Vastraswavalamban* at 25 per cent. | „ | 6·25 | 43·75 | 125 | 200 | 250 | 625·00 |
| 3. Marketable surplus | „ | 18·75 | 131·25 | 375 | 600 | 750 | 1875·00 |
| 4. Value of cloth at Rs. 1-2-0 per yard | Rs. crores | 2·11 | 14·77 | 42·19 | 67·50 | 84·38 | 210·95 |
| 5. Subsidy at as. 4 in the rupee. | „ | 0·53 | 3·69 | 10·55 | 16·88 | 21·09 | 52·74 |

## VI

## A.T.I.R.A.'S REPLIES TO THE QUESTIONNAIRE ON THE ECONOMIC ASPECTS OF THE AMBAR CHARKHA.

### A. *Cost of production of yarn.*

*Question* A1.—Raw Material.

Assuming that Ambar yarn in a range of 16 to 20 counts is to be produced, with indigenously grown cotton, what is the average price of cotton per candy that should be taken for purposes of calculating cost of production of yarn?

*Answer*:—Prices paid in Ahmedabad today for cottons spinning from 12's to 20's count yarn are as follows:—

| Count | Cotton | Price |
|---|---|---|
| 12's<br>14's | *Wagad* | Rs. 39-8-0 Per Bengal Maund. |
| 18's | *Jarila* | „ 700—750 per Candy. |
| 18's | *Kalyan* | „ 830 „ |
| 20's | *Bijay* | „ 960 „ |
| 20's | *Surti* | „ 1080 „ |

*Wastage*

*Question* A5:—What in your view is the percentage of cost that should be added on account of wastage?

*Answer*.—In our experiments the waste taken out in the *Dhunai Modhia* operation (Opening and cleaning) from the cotton spinning to 20's was on the average 8·2 per cent. This waste is not useable but it may fetch some return. The *Belni* waste is workable.

### B. *Subsidy on distribution of yarn.*

*Question* B2:—What is the difference between this (cost of production per lb. of yarn) and the cost of reeled mill yarn, between the ranges of 16's and 20's?

*Answer*:—Price paid in Ahmedabad on the wholesale basis for 10 lbs. of packet of 20's reeling yarn used in the experiments, was Rs. 17-8-0.

### C. *Subsidy on the distribution of Ambar Charkha.*

*Question* C1:—What is your estimate of the cost of production of your model of the Ambar Charkha?

*Answer*:—According to our rough estimate the cost would not exceed 10 per cent. of the present price of the Charkha Set.

We regret we are not in a position to reply to the questions still left out because of the lack of information and experience on the points inquired.

(Sd.) B. K. VAIDYA,
Assistant Director.

## VII

## DR. D. R. GADGIL'S REPLIES TO THE QUESTIONNAIRE ON ECONOMIC ASPECTS OF THE AMBAR CHARKHA.

Mrs. P. Johari,
Secretary to the Ambar Charkha Committee,
Ministry of Production, Govt. of India,
New Delhi.

Dear Madam,

Reference: Your letter No. 4.A.C.C./56, dated 1st May 1956.

The questions with which the Ambar Charkha Committee is concerned appear to be, in the main, technical. I am not competent to express an opinion on any of these. I should, however, like to express briefly my views in relation to subsidies etc. I should like the question to be considered as relating not to a particular model of the Charkha but to that of establishing in the country spinning on a decentralised basis which progressively becomes so efficient that ultimately no real subsidy is required from the community to bridge the gap between the cost of mechanical and power driven decentralised spinning and that of centralised factory spinning. I would, therefore, be against freezing technique at any particular stage or giving monopoly to a particular model by, here and now, basing the entire future production of new yarn on a model which is still capable of being improved or being replaced by another superior model.

In the light of the above I would suggest that:

(1) the help given to any form of decentralised spinning should be through subsidies and not through bans on other types of spinning;

(2) the extent of the subsidy ought to be limited by the type of considerations and the measure indicated by the Karve Committee;

(3) in no case should a definite monopoly be created in favour of any model until it can be proved that within measurable time, for production on that model, the subsidy can definitely be abolished;

(4) the wage obtained by spinners on any decentralised model should be considered as an important criterion and a new model should be established in areas and to the extent that labour is available in fair supply in the particular areas, at the rate of wages yielded by the model and which does not contain a substantial measure of subsidisation.

Yours faithfully,
(Sd.) D. R. GADGIL,
Director.

## VIII

## REPLIES OF THE DIRECTOR, SCHOOL OF ECONOMICS AND SOCIOLOGY, UNIVERSITY OF BOMBAY, TO THE QUESTIONNAIRE ON ECONOMIC ASPECTS.

Please refer to your letter No. 4-A.C.C. 56(B3), dated 14th May, 1956 on the above subject. We in this School have not made any special study of this subject and as such it is difficult to give our considered opinion on the same.

# APPENDIX VI

## Reports from the laboratries on the tests carried out on the Ambar Charkha, Ambar Yarn and Ambar Khadi

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# APPENDIX VI

## REPORTS FROM THE LABORATORIES ON THE TESTS CARRIED OUT ON THE AMBAR CHARKHA, AMBAR YARN AND AMBAR KHADI.

## A.T.I.R.A. REPORTS

### I

### INTERIM SUMMARY REPORT ON THE PERFORMANCE OF THE AMBAR CHARKHA

The Ambar Charkha set was received at A.T.I.R.A. for study and experiments as well as for the ultimate testing of its spinning performance, sometime in August 1955. In close collaboration with the workers provided by the Ambar Charkha Samiti of the Sarva Seva Sangh, A.T.I.R.A., carried out a series of preliminary experiments, spinning on the Charkha yarns of 18s, 24s and 30s count from the *Surti* and the *Vijay* varieties of bale cottons. Extensive physical tests for the lea strength, count, evenness and appearance, were made on these yarns and the programme lasted till about the end of November. Some idea of productive capacity of the various units of the Charkha set, was also obtained during this time.

The preliminary work on the Charkha indicated that the quality of the yarn spun could be improved by certain modifications of some of the parts in all the three units of the set, as well as by adopting certain alternative procedures in processing, particularly on the '*Belani*' machine. These indications were followed up quantitatively by numerous tests on rovings, when it was clear that variations in yarn counts, strength and evenness could be markedly reduced by the introduction of the mechanical modifications proposed and adoption of the revised methods of processing. The final model of the Charkha incorporating most of these modifications was approved by the Ambar Charkha technicians at a meeting held in Ahmedabad at the instance of the Ambar Charkha Samiti. The spinning performance of the Charkha and the weaving quality of the yarns produced are now being regularly studied by series of designed experiments on five spinning sets and one handloom, installed for the purpose in a special shed put up at A.T.I.R.A. by the Samiti. Yarns of 12s, 20s and 40s count are being spun respectively from the bale cottons, *Wagad, Vijay Rajpalayam*. About twenty yards of square cloth with the requisite number of ends and picks is being woven from each count of yarn. For comparison, mill yarns of corresponding counts, locally purchased, are also being tested for their quality and weaving performance on the same loom. The physical tests to which the Ambar Charkha as well as the Mill yarns are subjected are lea strength, count, uniformity, visual appearance and continuous winding breaks under tension. The cloth made from the two sets of yarns is being tested for tensile strength, bursting strength, abrasion, the number of ends and picks before and after de-sizing and for shrinkage on washing.

The modifications introduced in some of the constructional details of the units in the Charkha set and in the methods of processing the cotton through the various machines are described in Appendix A.

Appendix B shows the improvement in Ambar Charkha yarn which has resulted after introducing the changes as approved by the Ambar Charkha Samiti A systematic experiment with no further changes being introduced in the technique of spinning is now in progress. A.T.I.R.A. will be in a position to send by the end of March a detailed report covering 20s yarn and will also furnish comparative performance figures of the Ambar Charkha yarn with mill reeling yarn of the same count commonly being used by handloom weavers in the Ahmedabad area.

On behalf of A.T.I.R.A. it is a pleasure to thank Shri Krishnadas Gandhi, the Secretary, Ambar Charkha Samiti for placing at our disposal all the necessary resources.

## APPENDIX A

### Machine and Process Modifications

1. *Dhunai modhia (opener and Cleaner)*

Two modifications have been introduced in this machine which opens and cleans the cotton:—

(i) Strips of used doffer vibrating combs from the mill carding engine have been substituted for the ordinary rough galvanized iron combs fixed around the cyclinder, 3″ in diameter.

(ii) Setting between the feed plate and the cylinder has been made adjustable from 1/32″ to 3/32″ while the shape of the feed plate nose has also been suitably changed. These modifications were necessary in order to reduce the fibre rupture. The Bear Sorter analysis results of the *Vijay* Cotton samples opened with the old and modified units are given below:—

| | Old Dhunai Modhia | | Modified Dhunai Modhia | |
|---|---|---|---|---|
| | Bale cotton (Vijay) | Opened cotton | Bale cotton (Vijay) | Opened cotton |
| Effective length | 0·99″ | 0·95″ | 1·01″ | 1·00″ |
| Mean fibre length | 0·85″ | 0·80″ | 0·89″ | 0·87″ |
| Per cent. short fibres | 6·5 | 7·9 | 4·8 | 6·0 |

In processing cotton through the *Dhunai Modhia* the following procedure is adopted:—

(i) The unopened cotton is made into a lap form, suitable for feeding the machine by first using the drawing arrangement of the *"Belani"*. This lap is then fed, opened and cleaned only once through the *Dhunai Modhia.*

(ii) The opened cotton is made into a lap form 6″ wide ready for being processed on the Ambar belni.

2. *Ambar Belani* (Drawing and Roving Machine)

This machine combines the work of the drawing and the speed frames used in the normal mill operation. The modifications introduced are:

(i) Two sizes of roller stands have been made, one to suit short staple cotton with a centre to centre distance of 31/32″ and the other to suit the medium and the long staple varieties, with a centre to centre distance of 36/32″. The bottom fluted rollers are 7/8″ diameter in both the cases.

(ii) Racks with pegs have been provided as bottom supports of the top roller weighting springs, to simplify adjustment of spring pressure on the rollers. Ordinarily the pressure on the back roller is higher than that on the front one.

(iii) The feed table sides have been made smooth by fixing rounded wooden brackets thus avoiding the rubbing of the lap or silver against the rough sides. Wooden guides (crecent shaped) have been used to effect a safer feeding of silvers and rovings.

(iv) An extra pair of self weighted calender rollers set at a 45 inclination preceded by a funnel have been provided for use at the drawing stage prior to the insertion of twist. This device eliminates the irregularities formerly introduced in the rovings by an improper handling of the strands delivered.

At the same time it helps to make a proper consolidation of the fibres. During the latter operations of drawing the twisting the calender rollers are replaced by a polished, smooth tin plate and a funnel. The use of the plate eliminates the excessive ballooning of the delivered strand which would be otherwise detrimental to the quality of the roving.

(v) The dimensions of various pulleys used are in conformity with those set as standards for the full production.

(vi) The draft is maintained constant at about 5·0. In processing cotton through this machine the number of passages and the total doublings to be made are in accordance with the roving bank required. A variable number of passages and doublings are not desirable as the roller drafting irregularities increase with the number of processes, in spite of the doubling effect. For a hank of 2·0 to 3·0, 8 passages are desirable, while for a hank of 1·5, 7 passages are good enough. Whatever may be the number of passages the first drawing operation and the first drawing and twisting operation are always done with single hand feed. Since the draft in *Belni* is maintained constant at 5 the number of doublings used in the last one or two passages is decided on the roving hank delivered.

### 3. Amber Charkha (Spinning Frame)

The modifications in some constructional details of the Charkha are:

(i) Roller stands suitable for processing short, medium and long staples have been used with centre to centre distance of 7/8", 1" and 1·1/8" respectively. Both the bottom rollers are 6/8" diameter for short staple processing and 7/8" for processing long staples.

(ii) Lappet guides have been made adjustable with respect to the centre of ring and spindle. With the help of a simple spindle gauge it is easy to centre the spindles very quickly.

(iii) The angle of roller inclination to the horizontal has been fixed at 35.

(iv) The traverse length of the ring rail is 3". An antifriction bowl has been provided to follow the cam.

(v) All the four spindles are made to work in one horizontal plane by suitable adjustments of the heights of the spindle cord tension pulley from the spindle wharve level.

(vi) The dimensions of the various pulleys used are in conformity with the standards set for the full scale production.

In the final processing of cotton on the Charkha, single ends of roving are fed while the draft is maintained at 8 and the rate of yarn delivery at about 13 to 14 yards per minute.

### TABLE III

### Yarn Unevenness

| Yarn | Per. cent mean Deviation from normal | | Average and breaks in spinning per lb. of yarn. |
|---|---|---|---|
| | At low speed | Speed at High | |
| Preliminary experiments (Vijay Cotton 18s) | 21·2 | 23·8 | |
| Final test (Vijay Cotton 20s) . . . | 14·5 | 16·4 | 8·7 |

## PART IV

### Preparatory and Weaving particulars

| Yarn | Breaks per lb. of yarn | | Reed and picks per inch. | Length of warp | End breaks in looms | Production per hour |
|---|---|---|---|---|---|---|
| | Winding for warping. | Warping | | | | |
| Final test (Vijay Cotton 20s). | 133 | 5 | 46/46 | 12 yds. | 0 | 2·0 yards. |

## APPENDIX B

### TABLE I

Waste removed at *Dhunai Modhia* and *Belni*.

| Machine | Per. cent waste | Remarks |
|---|---|---|
| *Dhunai Modhia* . . . . . . | 8·5 | The figure includes the waste rejected in the process preparatory to opening. |
| *Ambar Belani* . . . . . | 4·9 | |
| Total Waste . . | 13·4 | |

### TABLE II

Average Count, Lea Strength, Coefficient of variation in Count and Strength and average turns per inch.

| Yarn | Average | | Coefficient of variation | | |
|---|---|---|---|---|---|
| | Count | Strength | Count | Strength | Twists per inch |
| **Preliminary experiments** . | 17·6 | 61·2 | 8·0 | 19·2 | .. |
| (Vijay Cotton, 18's Nominal) . | 18·4 | 56·0 | 6·0 | 18·9 | .. |
| **Final tests** (Vijay cotton 20's nominal) . . . . . | 19·6 | 84·6 | 7·0 | 12·6 | 19·2 |

(The average roving hank in the final test : 2·5).

## II

## THE PERFORMANCE OF AMBAR CHARKHA

(Supplement to the Interim Summary Report submitted on March 2, 1956 by A.T.I.R.A.—Ahmedabad)

1. *Cost comparison of cotton used for producting* 20*s Count-yarn in Charkha Spinning and Mill Spinning*:

The Ambar Charkha yarn of 20s count was produced from pure *Vijaya* cotton, whereas in composite mills it is customary to use cotton mixings for 20s, 19s and other nominal counts. Preliminary finding indicates that per pound the mill mixings for producing 19s-20s yarn would be anything from 6 pies to 2½ annas cheaper.

More detailed and accurate figures would be collected for the report to be submitted at the end of this month. Figures for the waste extracted in the Ambar Charkha and in the mill are comparable.

2. *Ambar Yarn Quality*: *Strength and Weaving Performance*:

In Table I below the comparative lea strength figures for Ambar Yarn and Mill Yarns (for handlooms and Mill-looms) are shown:

TABLE I

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| Yarn particulars | No. of tests | Average count | Coefficient of variation in count | Average Lea strength in lbs. | Coefficient of variation in Lea strength | Corrected strength | Remarks |
| *Ambar Yarn* | | | | | | | |
| Charkha Set I . | 48 | 19·0 | 10·3 | 81·6 | 9·4 | 75·5 | |
| Charkha Set II . | 48 | 19·7 | 6·7 | 85·0 | 13·0 | 83·1 | |
| Charkha Set III . | 54 | 19·8 | 6·7 | 86·6 | 13·8 | 85·3 | |
| Charkha Set IV . | 48 | 19·9 | 6·2 | 83·8 | 14·0 | 83·1 | |
| Charkha Set V . | 62 | 19·8 | 5·0 | 86·0 | 12·9 | 84·8 | |
| Corresponding Mill reeling yarn. | 160 | 20·0 | 4·3 | 75·8 | 11·2 | 75·7 | |
| *Mill Yarn** for handlooms* 20's *Count.* | | | | | | | |
| Mill Serial No. 65 . | 20 | 18·6 | 5·2 | 57·0 | 8·3 | 50·6 | |
| 66 . | 20 | 20·5 | 6·9 | 64·8 | 9·8 | 67·4 | |
| 67 . | 20 | 19·3 | 6·1 | 58·8 | 8·3 | 55·2 | |
| 68 . | 20 | 18·6 | 7·4 | 53·6 | 10·6 | 47·3 | |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| 69 . | 20 | 19·6 | 4·3 | 60·3 | 11·6 | 58·4 | |
| 70 . | 20 | 17·4 | 5·4 | 47·8 | 9·8 | 36·8 | |
| 71 . | 20 | 19·4 | 4·5 | 64·6 | 9·5 | 61·4 | |
| 72 . | 20 | 20·3 | 7·6 | 56·9 | 7·3 | 58·5 | |
| 73 . | 20 | 20·6 | 8·5 | 48·8 | 12·6 | 51·2 | |
| 74 . | 20 | 20·1 | 5·8 | 60·3 | 9·3 | 60·6 | |
| 75 . | 20 | 20·1 | 8·0 | 53·8 | 12·1 | 54·0 | |

**Samples received from the Textile Commissioner Office at Ahmedabad.

| *Mill Yarn for Mill*-looms* 19's *Count.* | | | | | | | Period |
|---|---|---|---|---|---|---|---|
| A . . . | 190 | 18·8 | 3·1 | 76·3 | 9·02 | 74·9 | June, 1955 |
| B . . . | 120 | 18·8 | 6·1 | 89·1 | 15·7 | 87·8 | June, July, 1955 |
| C . . . | .. | 19·14 | 4·7 | 77·7 | 9·2 | 78·6 | August, 1954 |
| D . . . | 120 | 18·8 | 4·6 | 71·5 | 11·9 | 70·4 | January, February, 1954 |
| E . . . | 80 | 18·4 | 4·8 | 87·6 | 10·3 | 85·5 | January, 1955 |
| F . . . | .. | 18·4 | 4·7 | 63·2 | 8·8 | 60·0 | February, 1956 |

*Results obtained from A.T.I.R.A. Mill reports.

It would be observed that the samples of mill reeling yarn supplied by the Textile Commissioner's Office at Ahmedabad show on the whole an inferior yarn quality than that of the yarn of comparable count used by the composite mills. We have no figures for mill reeling yarn produced by exclusive spinning mills. Since the practice in composite mills is to dispose of the low quality yarn for reeling purposes, the inferior quality of the mill reeling yarn as obtained locally probably from composite mills, could be readily understood. The mill reeling yarns which may be considered to be of a high standard quality are produced in south India and these would be tested as soon as they are received. It may be summarised that adequately trained spinners can produce on the improved Ambar Charkha, 20's yarn from pure *Vijaya* cotton of a quality comparable with the 19s-20s yarn produced by the composite mills for their own consumption, out of cotton mixings which are cheaper than the material used for the Ambar Charkha, to the extent of 3 to 12 per cent. as seen from the limited data at present at our disposal.

No trials have been made to determine whether with the cotton mixings of comparable quality as used in composite mills, Ambar Charkha can produce yarn of a quality comparable to that produced by the mills.

Comparative results of the weaving performance on the handloom, with the Ambar yarn and the Mill yarn are shown in Table II:

## TABLE II

### PREPARATORY AND WEAVING PERFORMANCES OF THE AMBAR AND THE MILL REELING YARNS

| Experimental Design | First Set | | Second Set | |
|---|---|---|---|---|
| | Mill Reeling Yarn | Ambar Yarn | Mill Reeling yarn | Ambar Yarn |
| Period | 14th to 22nd February, 1956 | 17th to 23rd February, 1956 | 24th to 27th February, 1956 | 28th Feb. to 1st March 1956 |
| Number of hanks used for Warp. | 32 | 27 | 28 | 30 |
| Number of hanks used for Weft . . . | 28 | 23 | 27 | 29 |
| Breaks per hank of warp while winding prior to warping . | 3·8 | 3·5 | 3·2 | 2·9 |
| Breaks per hank of warp while warping . | 0·28 | 0·26 | 0·14 | 0 |
| Breaks per hank of warp while sizing . | 0·47 | 0·11 | 0·36 | 0·07 |
| Breaks per hank of weft while filling pirns . | 3·4 | 2·1 | 3·7 | 2·3 |
| Length of cloth woven in yards . . . | 13·75 | 11·75 | 11·75 | 12·0 |
| Time for weaving . | 9 hours | 6 hours | 7·5 hours | 7·25 hours |
| Rate of weaving : Yards per hour . | 1·53 | 1·96 | 1·57 | 1·66 |
| Breaks per loom hour . | 0·55 | 0 | 0·40 | 0·55 |
| Ends/picks . | 46/46 | 46/46 | 46/46 | 46/46 |

As the number of experiments conducted on one handloom at A.T.I.R.A. are very limited, no significance can be attached to the difference in the weaving performance figures in the Table.

(Sd.) B. K. VAIYDA,
*Asstt. Director.*
(Sd.) B. R. RAMASWAMY,
*Senior Scientific Officer,*
*Liaison Division.*

AHMEDABAD;
*The 24th March*, 1956.

## III

## A.T.I.R.A. REPORT

## INTERIM SUMMARY REPORT ON THE PERFORMANCE OF THE AMBAR CHARKHA

## PART II

### 12'S COUNT YARN AND CLOTH TEST RESULTS OF 20'S COUNT YARN

After the study of the performance of the Ambar Charkha in 20's count, the work at A.T.I.R.A. between 20th February, 1956 and 5th March, 1956 was concerned mostly with 12's count yarn spun from *Wagad* bale cotton purchased from a local mill. The five sets of Charkhas used and the corresponding operators were the same as before. As in the first study the whole processing sequence was standardised with seven processes through the *Belni* instead of eight used in the 20's count. The different characteristics studied qualitatively were the roving hank, its irregularity, yarn count, lea strength, yarn irregularity, twist per inch, spinning breaks, continuous winding breaks the visual appearance etc. 20 yards of square cloth was woven, with the yarns spun on the handloom and the weaving performance particulars were noted. Various physical tests are being conducted at present on the cloth made. For comparative purposes about ten samples of mill reeling yarns received from the Textile Commissioner's office at Ahmedabad were also tested for all the relevant characteristics. One sample of mill reeling yarn purchased locally has also been woven on the same handloom for judging the relative weaving performance of the two yarns as also for assessing the qualities of the two cloths. Detailed production records were made in the spinning and the weaving operations.

Some of the important performance figures of the Charkha Set are shown in Tables I to XI given below:—

TABLE I

FIBRE LENGTH ANALYSIS (BY BERA SORTER) OF THE BALED WAGAD COTTON USED IN THE EXPERIMENT.

| Effective length in inches | Mean length in inches | Short fibre percentage | Coefficient of variation in length |
|---|---|---|---|
| 0·96 | 0·78 | 9·4 | 29·2 |

## TABLE II

### AVERAGE HANK AND IRREGULARITY OF ROVING MADE BY EACH WORKER ON THE *Belni*.

| Charkha Set No. | Roving hank | | | Irregularity | | |
|---|---|---|---|---|---|---|
| | Av. | Min. | Max. | Av. | Min. | Max. |
| 1 . . | 1·49 | 1·44 | 1·59 | 7·43 | 6·46 | 8·66 |
| 2 . . | 1·55 | 1·51 | 1·59 | 6·91 | 5·48 | 8·36 |
| 3 . . . | 1·58 | 1·49 | 1·65 | 7·21 | 5·98 | 9·61 |
| 4 . . . | 1·59 | 1·51 | 1·68 | 6·86 | 5·60 | 8·31 |
| 5 . . . | 1·56 | 1·51 | 1·60 | 7·22 | 5·30 | 8·73 |

## TABLE III

### END BREAKS IN SPINNING PER HOUR ON FOUR SPINDLES AND REELING BREAKS PER POUND OF YARN.

| Charkha Set No. | Yarn Count | Spinning breaks | Reeling breaks | Average weight and length of yarn per bobbin | |
|---|---|---|---|---|---|
| | | | | Weight/ tolas | Length in yards |
| 1 . . . . . . | 11·8 | 3·1 | 19 | 0·62 | 153·6 |
| 2 . . . . . . | 11·7 | 1·4 | 15 | 0·72 | 176·9 |
| 3 . . . . . . | 12·4 | 4·4 | 13 | 0·81 | 210·9 |
| 4 . . . . . . | 11·8 | 2·0 | 12 | 0·71 | 175·9 |
| 5 . . . . . . | 12·5 | 3·0 | 15 | 0·85 | 223·1 |

## TABLE IV

### COUNT, LEA STRENGTH AND THEIR VARIATION IN THE AMBAR YARNS.

| Yarn particulars | No. of tests. | Average count. | Coefficient of variation in count | Average lea strength in lbs. | Coefficient of variation in lea strength | Corrected strength |
|---|---|---|---|---|---|---|
| Charkha Set 1 . | 32 | 11·8 | 8·3 | 94·7 | 20·7 | 91·9 |
| Charkha Set 2 . | 48 | 11·7 | 5·4 | 104·5 | 12·1 | 100·6 |
| Charkha Set 3 . | 48 | 12·4 | 7·6 | 99·6 | 14·2 | 103·9 |
| Charkha Set 4 . | 52 | 11·8 | 5·1 | 103·7 | 12·8 | 101·2 |
| Charkha Set 5 . | 30 | 12·5 | 7·9 | 91·7 | 13·9 | 97·5 |

## TABLE V

### IRREGULARITY IN THE AMBAR YARN

| Yarn particulars | No. of tests | Per cent mean deviation | |
|---|---|---|---|
| | | At low speed | At high speed |
| Charkha Set 1 | 21 | 14·66 | 16·15 |
| Charkha Set 2 | 31 | 14·08 | 15·93 |
| Charkha Set 3 | 31 | 14·08 | 17·79 |
| Charkha Set 4 | 29 | 14·84 | 16·44 |
| Charkha Set 5 | 20 | 15·00 | 19·48 |

## TABLE VI

### AVERAGE TURNS PER INCH AND ITS COEFFICIENT OF VARIATION IN THE AMBAR YARN

| Yarn particulars | No. of tests | Average T.P.I. | Coefficient of variation in T.P.I. |
|---|---|---|---|
| Charkha Set 1 | 40 | 12·0 | 19·15 |
| Charkha Set 2 | 45 | 15·6 | 10·64 |
| Charkha Set 3 | 47 | 14·8 | 14·01 |
| Charkha Set 4 | 47 | 14·8 | 14·70 |
| Charkha Set 5 | 36 | 14·9 | 13·40 |

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## TABLE VII

### THE NUMBER OF CONTINUOUS WINDING BREAKS OBSERVED WITH THE AMBAR YARNS UNDER HIGH CONSTANT TENSION.

| Yarn particulars | Breaks/pound of yarn wound |
|---|---|
| Charkha I | 33·3 |
| Charkha II | 30·2 |
| Charkha III | 36·7 |
| Charkha IV | 42·4 |
| Charkha V | 47·4 |

(Rate of winding : 10 yards/minute on the Atwood Re-draw machine).

## TABLE VIII

### PREPRATORY AND WEAVING PERFORMANCE OF THE AMBAR YARN.

| Particulars | Ambar Yarn | |
|---|---|---|
| | First Set | Second Set |
| No. of hanks used for warp | 21 | 23 |
| No. of hanks used for weft | 22 | 23 |
| Breaks per hank of warp while winding prior to warping | 0·57 | 1·13 |
| Breaks per hank of warp while warping | 0·28 | 0·26 |
| Breaks per hank of warp while sizing | 0·33 | 0·26 |
| Breaks per hank of weft while filling pirns | 0·68 | 0·52 |
| Length of cloth woven in yards | 11·0 | 12·5 |
| Time for weaving | 6·5 hrs. | 6·0 hrs. |
| Rate of weaving/hour— | | |
| (*i*) | 1·69 yds. | 2·08 yds. |
| (*ii*) | 0·68 yds. | 0·79 yds. |
| Breaks per loom hour | 0·77 | 0·67 |
| Ends/picks | 40/40 | 40/40 |

(*i*) Only weaving (*ii*) Weaving including preparatory processes.

## TABLE IX

### PERCENT WASTE REMOVED IN THE *Dhunai Modhia* AND THE *Belni*.

| Machine | Minimum | Maximum | Average per cent waste |
|---|---|---|---|
| *Dhunai Modhia* | 7·2 | 14·0 | 9·6 |
| *Belni* I | 4·3 | 12·5 | 8·9 |
| *Belni* II | 2·6 | 9·1 | 5·9 |
| *Belni* III | 2·9 | 6·2 | 4·6 |
| *Belni* IV | 1·3 | 8·5 | 4·7 |
| *Belni* V | 4·1 | 10·0 | 7·5 |
| AVERAGE | 3·0 | 9·3 | 6·3 |

Further details of the study made on 12's count yarn and the cloth test of 20's count yarn will be given in the final consolidated report along with the necessary comments in due course.

(Sd.) B. R. RAMASWAMY,
*Senior Scientific Officer,*
*Liaison Division.*

AHMEDABAD;
*The* 18*th March,* 1956.

# TABLE X

## YARN PRODUCTION ON AMBAR CHARKHA

*Effective time required in hours to* ***process one pound*** *of cotton through*: (*1*) Dhunai Modhia, (*2*) Belni *and* (*3*) *Charkha and number of hanks of 12's count produced for eight hours effective working on* (*3*), (*2*)+(*3*) *and* (*1*)+(*2*)+(*3*)

| (1) Dhunai Modhia | | | | (2) Ambar Belni | | | | (3) Ambar Charkha | | | | | (2)+(3) (A.B.+A.C.) | | | | | (1)+(2)+(3) (D.M.+A.B.+A.C.) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Workker No. | Min. Hrs. | Max. Hrs. | Average hours | Worker No. | Min. Hrs. | Max. Hrs. | Average hours | Worker No. | Min. hrs. | Max. Hrs. | Average Hrs. | Hanks/ 8 effective hrs. | Worker No. | Min. Hrs. | Max. Hrs. | Average Hrs. | Hanks/ 8 effective Hrs. | Worer No. | Min. Hrs. | Max. Hrs. | Average Hrs. | Hanks per 8 effective Hrs. |
| 1 | 2·6 | 4·9 | 3·2 | 1 | 3·3 | 5·0 | 4·1 | 1 | 1·9 | 4·0 | 2·7 | 35·6 | 1 | 5·2 | 9·0 | 6·8 | 14·1 | 1 | 7·8 | 13·9 | 10·0 | 9·6 |
| | | | | 2 | 6·7 | 8·5 | 7·6 | 2 | 3·9 | 12·2 | 7·4 | 13·0 | 2 | 10·6 | 20·7 | 15·0 | 6·4 | 2 | 13·2 | 25·6 | 18·2 | 5·3 |
| | | | | 3 | 6·0 | 9·2 | 7·5 | 3 | 3·1 | 10·7 | 5·3 | 18·1 | 3 | 9·1 | 19·9 | 12·8 | 7·5 | 3 | 11·7 | 24·0 | 16·0 | 6·0 |
| | | | | 4 | 4·1 | 7·7 | 5·6 | 4 | 2·4 | 5·9 | 3·8 | 25·3 | 4 | 6·5 | 13·6 | 9·4 | 10·2 | 4 | 9·1 | 18·5 | 12·6 | 7·6 |
| | | | | 5 | 5·6 | 7·8 | 6·4 | 5 | 3·3 | 5·3 | 4·5 | 21·3 | 5 | 8·9 | 13·1 | 10·9 | 8·8 | 5 | 11·5 | 18·0 | 14·1 | 6·8 |

(1) In the Ambar Belni seven processes were used in making the roving of required hank from the lap instead of the eight processes used in case of 20's count. This shortened process, thus, enabled a **decrease in processing** time on the *Belni*.

(2) In the Ambar Charkha the front roller delivery was increased by 16 per cent over the one used for spinning 20's yarn in order to impart the lower twist needed for the 12's count yarn.

## TABLE XI

Ends and picks per inch and the Warp/Weft Tensile Strength and Elongation particulars of cloth (Grey) woven from 20's Ambar and mill reeling yarns.

| Particulars | First set | | Second set | |
|---|---|---|---|---|
| | Ambar Yarn | Mill Reeling yarn | Ambar yarn | Mill Reeling yarn |
| Average ends per inch | 47·0 | 47·0 | 48·0 | 47·0 |
| Average picks per inch | 46·0 | 46·0 | 51·0 | 49·0 |
| Warpwise strength in lbs. | 67·5 | 63·6 | 68·9 | 63·4 |
| Coefficient of Variation in warpwise strength | 10·3 | 8·9 | 10·6 | 11·4 |
| Percent elongation | 6·9 | 5·6 | 6·3 | 6·3 |
| Weftwise strength in lbs. | 65·8 | 57·1 | 74·6 | 63·7 |
| Coefficient of variation in weftwise strength | 12·3 | 9·4 | 9·8 | 10·0 |
| Percent elongation | 5·2 | 5·5 | 8·8 | 7·5 |

Length of cloth test specimen : 8″
Width of cloth test specimen : 2″

## IV

## REPORT ON THE PERFORMANCE OF THE AMBAR CHARKHA

### *PART I, (with appendices A, B, C, and D)*

### 20's Count Yarn

### 1. *Preliminary Work and Modifications*

The Ambar Charkha set consisting of three units, *Dhunai Modhia, Belni* and Charkha, was received at A.T.I.R.A. on August 10, 1955, through Akhil Bharat Sarva Seva Sangh, Wardha, who despatched it at the instance of the Ministry of Commerce and Industry, Government of India for study and experiments as well as for the ultimate testing of its spinning performance. Since then in close collaboration with the workers provided by the Ambar Charkha Samiti of the Sarva Seva Sangh, A.T.I.R.A. has been carrying out spinning trials with a number of cottons. A series of preliminary experiments were done by spinning on the Charkha yarns of 18's, 24's and 30's count from the *Surti* and *Vijay* varieties of baled cottons. Extensive physical tests for the lea strength, count, evenness and appearance, were made on these yarns and this programme lasted till about the end of November. Some idea of production capacity of the various units of the Charkha set, was also obtained during this time. The preliminary work on the Charkha indicated that the quality of the yarn spun could be improved by certain modifications of some of the parts in all the three units of the set, as well as by adopting certain alternative procedures in processing, particularly on the '*Belni*' machine. These indications were followed up quantiatively by numerous tests on mill rovings, when it was clear that variations in yarn counts, strength and evenness could be markedly reduced by the introduction of the mechanical modifications proposed and adoption of the revised methods of processing. The final models of the Charkha units, incorporating most of these modifications, were approved by the Ambar Charkha technicians at a meeting held under the auspices of the Ambar Charkha Samiti, on February 18 and 19 at Ahmedabad. Complete machine drawings of all the parts used in the three units were made and photostat copies of various drawings on 32 sheets made up in form of two folders were sent out to the All India Khadi and Village Industries Board, Bombay.

## 2. *Test Programme and Procedure*

The spinning performance of the Charkha and the weaving quality of the yarns produced are now being regularly studied by a series of designed experiments on five spinning sets (each set consisting of a *Belni* and a Charkha only attended by one worker) and one handloom, installed for the purpose in a special shed (unconditioned) put up at A.T.I.R.A. by the Samiti. The *Vijay* or the *Wagad* variety of baled cotton purchased from local mills was opened out by only one worker on a single *Dhunai Modhia* in quantities required at a time, to feed all the five Charkha sets. Yarns of 20's and 12's counts were then spun respectively from the *Vijay* and the *Wagad* cottons. About twenty yards of square cloth with the requisite number of ends and picks has been woven from each count of yarn. For comparison, mill yarns of corresponding counts purchased locally and obtained through the Textile Commissioner's Office at Ahmedabad, were tested for their quality and weaving performance on the same loom. The physical tests to which the Ambar Charkha as well as the Mill yarns were subjected were lea strength, count, twist per inch and their variations, uniformity, visual appearance and continuous winding breaks under tension. The cloth made from the two sets of yarns is now being tested for tensile strength, bursting strength, the number of ends and picks before and after desizing and for shrinkage on washing.

## 3. *Points of Information Gathered*

The modifications introduced in some of the constructional details of the units in the Charkha set and in the methods of processing the cotton through the various machines are described in Appendix 'A', which also shows in Tables I, II and III, the improvements brought about in the fibre and yarn qualities of the cotton processed through the machines after the introduction of some necessary modifications.

In Appendix 'B', Table I gives the fibre length characteristics of the *Vijay* bale cotton used for spinning 20's count yarn on the Ambar Charkha, while Table II shows the hank and the irregularity values of the rovings produced on the *Belni*. Table III shows end-breaks in spinning and reeling and yarn content per bobbin. Tables IV to VII give results of comparative tests carried out for the Ambar yarn spun and the mill reeling yarn samples, one (a) of which was purchased locally and twelve others (b) from twelve mills obtained through the Textile Commissioner's Office at Ahmedabad. Corresponding count and strength results for six samples of yarn (c) produced by six different A.T.I.R.A. member mills, for their own consumption, have been obtained from A.T.I.R.A. records and have been also included in the Table IV. These tables deal with the spinning breaks, yarn count and lea strength, yarn irregularity and twist as well as continuous yarn winding breaks at high tension. Table VIII shows the variation observed in a designed experiment, of the yarn qualities as influenced by personal, mechanical and environmental conditions.

Weaving performance of the Ambar yarn and the Mill reeling yarn sample (a), showing figures for the number of yarn breaks at various stages and the rate of weaving is given in Table IX.

The amount of waste produced at various stages in spinning and weaving and the percentage of total time utilised in both these operations are shown by the respective figures given in Table X and XI (A and B).

Finally production figures in spinning, expressed in effective hours per lb. and hanks per eight effective hours on an average, for each of the five workers and as observed in their day to day outputs for 12 days, are shown in Table XII (A, B, C, and D and E). Specimens of the Forms A, B, C, and D provided to each spinner for the day to day record of his work; (i) opening and carding (ii) Drawing-Roving (iii) Spinning and (iv) Reeling, are given at the end of the Appendix 'B'

Appendix C shows the Average Daily Production Charts (Hanks per eight hours effective working) for (i) Charkha only (ii) *Belni* and Charkha, and (iii) *Dhunai Modhia*, *Belni* and Charkha combined.

Appendices $D_1$ to $D_3$ are issued separately as follows:—

$D_1$ irregularity Records of the Ambar Rovings, the Ambar Yarns and the Mill Reeling Yarns.

$D_2$ Appearance photographs of the Ambar and the Mill Reeling Yarns.

$D_3$ Machine Drawings of the Ambar Set Units and their parts:—

PART I:—*Dhunai Modhia* and *Belni.*

PART II:—Ambar Charkha

### 4. *Consolidated Summary of the Results*

A consolidated summary of all the pertinent results compiled from various tables of Appendix B, is made up for convenience of reference, in the five tables given below. They deal with the (1) quality particulars of cotton fibres and roving, comparative qualities of the Ambar and the Mill yarns in (2) spinning and in (3) weaving, (4) percent waste and time utilization in spinning and weaving and (5) production in spinning and weaving. Significant points to be noted are shown in the remarks column against each of the items included in the tables.

## TABLE I

### *Cotton Fibres and Roving*

| Material | Quality particulars | Remarks | Reference | |
|---|---|---|---|---|
| | | | Appendix | Table |
| Vijay Bale Cotton . | Mean Fibre length 0·88 inch. | No significant damage was done to fibres during the opening process on the improved *Dhunai Modhia* (*a*). | B | I |
| | Effective fibre length 1·00 inch | | A | I |
| Rovings made on Ambar Charkha. | (1) Average Hank 2·56<br>Range of Hank 2·44—2·72<br>(2) Average irregularity 8·2<br>Range of irregularity. 7·2—9·5 | No abnormal variations were noticed between machine to machine and from day to day. (*b*). | B | II |

(*a*) The *Dhunai Modhia* in its present improved form does not cause any significant damage to cottons of shorter staple like *Wagad* and *Vijay*. However, the long staple cotton like Co2, *Rajpalayam*, etc., seem to suffer damage in order to minimise which some further modifications are being tried out in the unit.

(*b*) As mentioned before process standardisations by way of number of passage doublings and draft on *Belni* is most important if the roving hank variation and its irregularity is desired to be very low.

## TABLE II

### *Comparative spinning qualities of the Ambar and the Mill Yarns*

| Quality particulars | Ambar yarn | Mill Yarns | | | Remarks | Reference | |
|---|---|---|---|---|---|---|---|
| | | (*a*)* | (*b*)* | (*c*)* | | App. | Table |
| (1) End breaks in spinning per hour on four spindles Range. | 0·64—2·24 | .. | .. | .. | One out of five Charkhas showed abnormally large number of spinning breaks. The average breakage rate is however not much higher than what is observed in a normal spinning mill for the count in consideration. | B | III |
| (2) Count : | 19·6 | 20·0 | .. | .. | | B | IV |
| Average Range | 19·7—19·9 | .. | 17·4—20·6 | 18·4—19·1 | | | |
| C.V. (p.c.) | 7·0 P.C. | 4·3 | 4·5—8·5 | 3·1—6·1 | | | |

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| Quality particulars | Ambar yarn | Mill Yarns (a)* | Mill Yarns (b)* | Mill Yarns (c)* | Remarks | Reference App. | Reference Table |
|---|---|---|---|---|---|---|---|
| (3) Lea strength corrected for 20's Average | 82·4 | 75·8 | .. | .. | The Ambar yarn stands in good comparison to the Mill Reeling yarns though the lot (*b*) is inferior to it which may be due to the various reasons listed in the Appendix B (Table IV). | B | IV |
| Range | 75·5—85·3 | .. | 36·8—67·4 | 60·0—87·8 | | | |
| C.V. (p.c.) | 12·6 | 11·2 | 7·3—12·6 | 8·8—15·7 | | | |
| (4) Irregularity (p.c.) | | | | | | | |
| Low speed . | 14·6 | 14·1 | 13·3—18·7 | .. | Ambar yarn comparable with the mill reeling yarn (*a*). | B | V |
| High ,, . | 16·4 | 16·0 | 15·2—21·2 | .. | | $C_1$ | FIGS |
| (5) Turns per inch Average | 19·3 | 19·8 | .. | .. | Turns per inch as well as C.V. compare well with (*a*) and (*b*) type mill reeling yarns. Due to a greater possibility of spindle slippage a good check up is essential to keep the T.P.I. and its variation well within limits. | B | VI |
| Range . | 18·6—21·1 | .. | 18·3—22·1 | .. | | | |
| C.V. (p.c.) . | 20·7 | 18·8 | 13·2—38·6 | .. | | | |

(*a*) One 10 lb. sample of Reeling Yarn purchased locally.
(*b*) Twelve samples obtained from the Textile Commissioner's Office, Ahmedabad.
(*c*) Yarns from composite Mills.

| Quality particulars | Ambar yarn | Mill yarns (a)* | Mill yarns (b)* | Mill yarns (c)* | Remarks | Reference App | Reference Table |
|---|---|---|---|---|---|---|---|
| (6) Winding breaks per pound : | | | | | Ambar yarns and yarn (*a*) show fewer number of breaks as compared with (*b*) yarns. The Ambar yarn is not weaker than the mill reeling yarns | B | VII |
| Average | 96·3 | 91·4 | .. | .. | | | |
| Range | 81·5—116·0 | .. | 102·4—156·7 | .. | | | |
| (7) Appearance . | .. | .. | .. | .. | Ambar yarns are comparable with mill yarns (*a*) & (*b*). | C2 | FIGS |

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| (8) Variation Factors | Ambar Yarns Count | Strength | irregularity | N.S.—Non-significant S. Significant. | | |
|---|---|---|---|---|---|---|
| During 3 working days between 3 workers using 3 sets. | | | | Influence of Mechanical factor may be reduced by further controls, whereas the personal factor depend on the aptitude, training, etc. of the worker. | B | VIII. |
| Personal | (N.S.) | (S.) | (N.S.) | | | |
| Mechanical | (N.S.) | (N.S.) | (S.) | | | |
| Periodical | (S) | (N.S.) | (N.S.) | | | |

## TABLE III

### *Comperative Weaving Qualities of the Amber and the Mill Yarns*

| Quality particulars | Ambar yarn | Mill yarn (*a*) | (*b*) | (*c*) | Remarks | Reference Appendix | Table |
|---|---|---|---|---|---|---|---|
| Breaks per Hank (Average) | | | | | Though Ambar yarns show fewer breakages no significance can be attached to the differences on account of the insufficient number of tests taken on only one handloom. | B | IX* |
| Winding . | 3·20 | 3·50 | .. | .. | | | |
| Warping . | 0·13 | 0·21 | .. | .. | | | |
| Sizing . | 0·24 | 0·41 | .. | .. | | | |
| Weft Filling | 2·20 | 3·55 | .. | .. | | | |
| Breaks per loom hour (Average) | 0·28 | 0·47 | .. | .. | | | |

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## TABLE IV

### *Percent Waste and Time Utilisation in Spinning and Weaving*

| Particulars | Spinning (Ambar Yarn) | Weaving | | | Remarks | Reference | |
|---|---|---|---|---|---|---|---|
| | | | Ambar yarn | Mill yarn | | App. | Table |
| Percent waste | (*i*) *On Dhunai Modhia*<br>Average 8·2<br>Range 5·6—11·7<br>(*ii*) *On Belaui*<br>Average 4·9<br>Range 2·1—8·3 | In warping and weft filling | 0·67 | 0·79 | It is possible to reduce waste in *Belani* as almost all the waste going out is avoidable if the worker is careful. Total spinning waste compares well with the avg. Mill spinning waste. Waste in weaving is not practically significant. | B | X |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| | *Ambar yarn* | *Ambar yarn* | | | | | |
| Percent time utilised at various stages per lb. | | | | | Possibility of reducing time by further improvements in *Dhunai Modhia Belani* and Charkha. | | XIA |
| (*i*) *Dhunai Modhia*. | 24·9 | (*i*) Winding | | 12·4 | | | |
| (*ii*) Belani | 43·8 | (*ii*) Warping | | 16·2 | | | |
| (*iii*) Charkha | 30·4 | (*iii*) Warping tieing | | 11·2 | | | |
| (*iv*) Reeling | 0·9 | (*iv*) Sizing | | 6·9 | | | |
| | | (*v*) Weft filling | | 16·5 | | | |
| | | (*vi*) Weaving | | 36·0 | | | |
| | | (*vii*) Misc. | | 0·8 | | | |
| Percent time spent by each worker on Belani, Charkha and rest period | | | | | | | |
| (*i*) On Belani | 52·1 | .. | | | Rest period sufficient. | | XIB |
| (*ii*) on Charkha | 29·0 | | | | | | |
| (*iii*) Rest | 18·9 | | | | | | |

## TABLE V

### *Production in Spinning and Weaving*

| Production | Spinning | | Weaving | | | | Remarks | Reference | |
|---|---|---|---|---|---|---|---|---|---|
| | Modhia + Belani + Charkha | Charkha only | Production yards per hour | | | | | App. | Table |
| | | | Weaving only | | Preparatory + weaving | | | | |
| | | | Ambar yarn | Mill yarn | Ambar yarn | Mill yarn | | | |
| Hours per lb. | | | | | | | | | |
| Average | 28·7 | 8·8 | | | | | | | XII |
| Range | 18·3—40·2 | 4·9—13·8 | 1·81 | 1·55 | 0·65 | 0·61 | Possibility of increase in production by improvements in Dhunai Modhia, Belani and Charkha.<br>Weaving comparable to mill yarns. | B<br>C3 | A, B, C, D E.<br>FIGS |
| Hanks per 8 hours— | | | | | | | | | |
| Average | 5·6 | 18·9 | .. | .. | .. | .. | | | |
| Range | 4·0—8·9 | 12·4—34·9 | | | | | | | |

### 5. *Conclusions*

The improvements brought about in the original models of the *Dhunai Modhia,* the *Belani* and the Charkha have been instrumental in raising considerably the quality of the yarn ultimately produced on the Ambar Charkha. However, for making a good yarn three conditions have to be fulfilled, namely:—

(a) various parts in all the three units of the set should conform to the specified sizes laid down for each of them;

(b) all the settings and other details should be carefully checked before and in course of working, by means of standard gauges supplied to each worker; and

(c) processing instructions should be followed carefully. Experience with yarns spun at A.T.I.R.A., and elsewhere, when one or more of the above conditions were not observed, has shown that the yarn quality deteriorates, particularly in point of variations in count, strength and uniformity.

During the present series of experiments the main emphasis has been laid on the quality rather than on the quantity of yarn spun. The production figures in Table XII of Appendix B should be, therefore, accepted with the reservations that (a) the feeding material for each of the units in the set was prepared only according to the demand; (b) on account of the mechanical and processing modifications introduced in the *Belani* working, the workers were required to spend more than the normal amount of time on this machine; (c) the production rate of one out of the five workers was much below the average; and (d) the average daily production has been calculated only on the basis of twelve days' work.

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Further modifications are being introduced in the *Dhunai Modhia* and the *Belani* for increased output.

Part II of this Report will deal with the quality of the Ambar Yarn of 12's count and cloth from 20's Ambar Yarns.

On behalf of A.T.I.R.A., it is a pleasure to thank Shri Krishandas Gandhi of the Ambar Charkha Samiti for placing at our disposal all the necessary facilities in men and materials. We are also thankful to Shri N. M. Mukerjee and his colleagues at the Textile Commissioner's Office, Ahmedabad, for readily responding to our request for various types of cotton and yarn samples from cotton mills in Ahmedabad and elsewhere.

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AHMEDABAD;
*The* 14*th May,* 1956.

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# A.T.I.R.A. REPORT

## 6. APPENDIX 'A'

### *Machine and Process Modifications*

1. *Dhunai Modhia (Opener and Cleaner).*

Two modifications have been introduced in this machine which opens and cleans the cotton:

(i) strips of used or new doffer vibrating combs from the mill carding engine have been substituted for the ordinary rough galvanised iron combs (fixed around the cylinder) 3″ in diameter;

(ii) setting between the feed plate and the cylinder has been made adjustable from 1/32″ to 3/32″ while the shape of the feed plate nose has also been suitably changed.

These modifications were necessary in order to reduce the fibre rupture. The Baer Sorter analysis result of the *Vijay* cotton samples opened with the old and modified units are given below:

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TABLE I

*Comparative performance of the old and the modified Dhunai Modhia*

| | Old Dhunai Modhia | | Modified Dhunai Modhia | |
|---|---|---|---|---|
| | Bale cotton (Vijay) | Opened cotton | Bale cotton (Vijay) | Opened cotton |
| Effective length . | 0·99″ | 0·95″ | 1·01″ | 1·00″ |
| Mean Fibre length . | 0·85″ | 0·80″ | 0·89″ | 0·87″ |
| Percent Short Fibres . | 6·5 | 7·9 | 4·8 | 6·0 |

In processing cotton through the *Dhunai Modhia,* the following procedure is adopted:

(i) the unopened cotton is made into a lap form, suitable for feeding the machine by first using the drawing arrangement of the "*Belani*". This lap is then fed, opened and cleaned only once through the *Dhunai Modhia;*

(ii) the opened cotton is made into a lap form 6″ wide and 2 feet long in a specially made box ready for being processed on the Ambar *Belani.*

### 8. *Ambar Belani (Drawing and Roving Machiner).*

This machine combines the work of the drawing and the speed frames used in the normal mill operation. The modifications introduced are:

(i) two sizes of roller stands have been made, one to suit short-staple cotton with a centre to centre distance of 31/32″ and the other to suit the medium staple varieties, with a centre to centre distance of 36″/32″. The bottom fluted rollers are 7/8″ diameter in both the cases;

(ii) racks with pegs have been provided as bottom supports of the top roller weighting springs, to simplify adjustment of spring pressure on the rollers. Ordinarily the pressure on the back roller is slightly higher than that on the front one;

(iii) the feed table sides have been made smooth by fixing rounded wooden brackets thus avoiding the rubbing of the lap or sliver against the rough sides. Wooden guides (crescent shaped) have been used to effect a safer feeding of slivers and rovings;

(iv) an extra pair of self weighted calender rollers set at a 45° inclination preceded by a funnel have been provided for use at the drawing stage prior to the insertion of twist. This device eliminates the irregularities formerly introduced in the rovings by an improper handling of the strands delivered.

At the same time it helps to make a proper consolidation of the fibres. During the latter operations of drawing and twisting the calender rollers are replaced by a polished, smooth tin plate and a funnel. The use of the plate eliminates the excessive ballooning of the delivered strand which would be otherwise detrimental to the quality of the roving;

(v) The dimensions of various pulleys used are in conformity with those set as standards for the mass scale production;

(vi) The draft is maintained constant at about 5·0.

In processing cotton through this machine the number of passages and the total doublings to be made are in accordance with the roving hank required. A variable number of passages and doublings are not desirable as the roller drafting irregularities increase with the number of processes, in spite of the doubling effect. For a hank of 2·5 to 5·0, 8 passages are desirable, while for a hank of 1·5, 7 passages are good enough. Whatever may be the number of passages the first drawing operation and the first drawing and twisting operation are always done with single and feed.

Since the draft in Belani is maintained constant at 5 the number of doublings used in the last one or two passages is decided on the roving hank delivered. For 20's yarn four processes have been used in drawing operation with 1,4,4,4, ends up in each process, whilst the other four processes have been used for drawing and twisting with 1,4,4,4 ends up. The actual doublings in the 8th process is decided on the basis of the hank of roving made in the 7th process. Roving hank checks are thus made in both the 7th and the 8th processes.

### 3. *Ambar Charkha (Spinning Frame)*

The modifications in some constructional details of the Charkha are:—

(i) roller stands suitable for processing short, medium and long staples have been used with centre to centre distance of 7/8″, 1″ and 1·⅛″ respectively. Both the bottom rollers are 6/8″ diameter for short staple processing and 7/8″ for processing medium and long staples;

(ii) lappet guides have been made adjustable with respect to the centre of ring and spindle. With the help of a simple spindle gauge it is easy to centre the spindles very quickly. Lappet guides can be lifted up for easing piecing and doffing;

(iii) the angle of roller inclination to the horizontal has been fixed at 35°;

(iv) the traverse length of the ring rail is 3″. An antifriction bowl has been provided to follow the cam. Distance between the front top tip of the roller stand and ring rail at its bottom most and top most points have been fixed at 8·5 and 5·5 inches respectively;

(v) all the four spindles are made to work in one horizontal plane by suitable adjustments of the heights of the spindle cord tension pulley from the spindle wharve level;

(vi) the dimensions of the various pulleys used are in conformity with the standards set for the mass scale production;

(vii) as in *Belani*, racks with pegs have been provided as bottom supports of top roller weighting springs.

In the final processing of cotton on the Charkha, single ends of roving are fed while the draft is maintained at 8 (for 12's and 20's counts) and the rate of yarn delivery at about 13 to 14 yards per minute.

The yarn obtained is wet reeled (to allow for twist setting) into hanks on a wrap reel, dried sufficiently for three days before testing under standard conditions of temperature and humidity.

Figures for the yarn strength, count and their variations as well as yarn irregularity or unevenness before and after the introduction of the modifications are shown in Tables II and III below:

### TABLE II

*Average Count, Lea Strength and coefficient of Variation in Count and Strength of yarn before and after the introduction of modifications.*

| Yarn | No. of tests | Average | | Coefficient of variation | |
|---|---|---|---|---|---|
| | | Count | Strength | Count | Strength |
| Preliminary experiments (*Vijay* cotton 18's nominal) | 68 | 17·6 | 61·2 | 8·0 | 19·2 |
| | 64 | 18·4 | 56·0 | 6·0 | 18·9 |
| Final tests (Vijay Cotton 20's nominal) | 260 | 19·6 | 84·6 | 7·0 | 12·6 |

(The average roving hank in the final test: 2·5)

REMARKS: Significant increase in yarn strength observed even with finer count by the introduction of various improvements in the units is apparent.

### TABLE III

*Yarn Evenness before and after the introduction of modifications*

| Yarn | Percent mean deviation from normal | |
|---|---|---|
| | At low speed | At high speed |
| Preliminary experiments (Vijay cotton 18's) . . . | 21·2 | 23·8 |
| Final test (Vijay cotton 20's) . . . . . | 14·5 | 16·4 |

REMARKS : Substantial decrease in unevenness of yarn is observed after effecting the modifications.

## 7. APPENDIX B

### TABLE I

*Fibre Length Analysis (By Baer Sorter) of the baled Vijaya cotton used in the experiments*

| Effective length in inches | Mean length in inches | Short fibre percentage | Coefficient of variation in length |
|---|---|---|---|
| 1·00 | 0·88 | 5·20 | 21·53 |

NOTE : Effective length is the nearest approach to the classers staple length.
Mean length is the arithmetic mean of the length of all the fibres in the sample.
Short fibre percent includes all fibres in the sample shorter than about half the effective length.
Coefficient of variation in length is a measure of non-uniformity in the length of the fibres. The larger this value the greater the non-uniformity in fibre length.

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## TABLE II

## *Average hank and irregularity of roving made by each worker on the belni.*

| Charkha Set No. | *Roving Hank |  |  | Irregularity (P.C.) |  |  |
|---|---|---|---|---|---|---|
|  | Average | Min. | Max. | Average | Min. | Max. |
| I | 2·51 | 2·41 | 2·73 | 8·50 | 7·49 | 10·85 |
| II | 2·56 | 2·45 | 2·69 | 8·14 | 6·97 | 9·13 |
| III | 2·60 | 2·45 | 2·78 | 8·50 | 7·38 | 9·58 |
| IV | 2·56 | 2·41 | 2·77 | 8·20 | 6·87 | 9·41 |
| V | 2·57 | .2·47 | 2·64 | 7·83 | 7·17 | 8·35 |

*Irregularity of Roving was tested on a Fielden Walker Evenness Tester at 5 feet material speed per minute.

## TABLE III

## *End breaks in Spinning per hour on four spindles and Reeling breaks per pound of yarn*

| Charkha Set No. | Yarn count | Spinning breaks | Reeling breaks | Average weight and length of yarn per bobbin |  |
|---|---|---|---|---|---|
|  |  |  |  | Wt/Tolas | Length/Yds. |
| I | 18·0 | 0·64 | 12·4 | 0·44 | 175·6 |
| II | 19·7 | 0·85 | 17·4 | 0·42 | 173·7 |
| III | 19·8 | 2·24 | 20·1 | 0·44 | 182·9 |
| IV | 19·9 | 0·85 | 14·7 | 0·48 | 200·6 |
| V | 19·8 | 1·08 | 11·2 | 0·47 | 195·4 |

## TABLE IV

## *Count, lea strength and their variations in the Ambar and the Mill yarns*

| Yarn particulars | No. of tests. | Average count | Coefficient of variation in count | Average lea strength in lbs. | Coefficient of variation in lea strength | Corrected strength | Remarks |
|---|---|---|---|---|---|---|---|
| *Ambar Yarn* |  |  |  |  |  |  |  |
| Charkha Set I | 48 | 19·0 | 10·3 | 81·6 | 9·4 | 75·5 |  |
| Charkha Set II | 48 | 19·7 | 6·7 | 85·0 | 13·0 | 83·1 |  |
| Charkha Set III | 54 | 19·8 | 6·7 | 86·6 | 13·8 | 85·3 |  |
| Charkha Set IV | 48 | 19·9 | 6·2 | 83·8 | 14·0 | 83·1 |  |
| Charkha Set V | 62 | 19·8 | 5·0 | 86·0 | 12·9 | 84·8 |  |
| Corresponding Mill Reeling Yarn | 160 | 20·0 | 4·3 | 75·8 | 11·2 | 75·7 |  |

| Yarn particulars | No. of tests | Average count | Coefficient of variation in count | Average lea strength in lbs. | Coefficient of variation in lea strength | Corrected strength | Remarks |
|---|---|---|---|---|---|---|---|
| Mill Yarn* for handlooms 20's count Mill Sr. No. | | | | | | | |
| 65 . . . . | 20 | 18·6 | 5·2 | 57·0 | 8·3 | 50·6 | |
| 66 . . . . | 20 | 20·5 | 6·9 | 64·8 | 9·8 | 67·4 | |
| 67 . . . . | 20 | 19·3 | 6·1 | 58·8 | 8·3 | 55·2 | |
| 68 . . . . | 20 | 18·6 | 7·4 | 53·6 | 10·6 | 47·3 | |
| 69 . . . . | 20 | 19·6 | 4·3 | 60·3 | 11·6 | 58·4 | |
| 70 . . . . | 20 | 17·4 | 5·4 | 47·8 | 9·8 | 36·8 | |
| 71 . . . . | 20 | 19·4 | 4·5 | 64·6 | 9·5 | 61·4 | |
| 72 . . . . | 20 | 20·3 | 7·6 | 56·9 | 7·3 | 58·5 | |
| 73 . . . . | 20 | 20·6 | 8·5 | 48·8 | 12·6 | 51·2 | |
| 74 . . . . | 20 | 20·1 | 5·8 | 60·3 | 9·3 | 60·6 | |
| 75 . . . . | 20 | 20·1 | 8·0 | 53·8 | 12·1 | 54·0 | |
| 81 . . . . | 40 | 19·7 | 4·8 | 79·7 | 11·8 | 77·9 | |

*Composite mill reeling yarn samples received from the Textile Commissioner's Office at Ahmedabad.

| Yarn particulars | No. of tests | Average count | Coefficient of variation in count | Average lea strength in lbs. | Coefficient of variation in lea strength | Corrected strength | Remarks |
|---|---|---|---|---|---|---|---|
| *Mill Yarn for mill-looms** | | | | | | | *Period* |
| 19's Count | | | | | | | |
| A . . . . | 190 | 18·8 | 3·1 | 76·3 | 9·02 | 74·9 | June '55 |
| B . . . . | 120 | 18·8 | 6·1 | 89·1 | 15·7 | 87·8 | June<br>July '55 |
| C . . . . | .. | 19·14 | 4·7 | 77·7 | 9·2 | 78·6 | Aug. '54 |
| D . . . . | 120 | 18·8 | 4·6 | 71·5 | 11·9 | 70·4 | January<br>Feb. '54 |
| E (18's). . . | 80 | 18·4 | 4·8 | 87·6 | 10·3 | 85·5 | Jan. '55 |
| F . . . . | .. | 18·4 | 4·7 | 63·2 | 8·8 | 60·0 | Feb. '56 |

*Data obtained from the A.T.I.R.A. Records for some of the Member Mills.

NOTE : In composite mills it is the general practice to use cotton mixings rather than pure varieties of cottons for yarns required for their own consumption as well as those sold for handloom purposes (Reeling yarn). The lower quality yarn produced by the mills is also sold out as reeling yarns. Their inferior quality could therefore be readily understood.

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## TABLE V

### *Irregularity in the Ambar and the Mill Yarns**

| Yarn particulars | No. of tests | Per cent mean deviation | |
|---|---|---|---|
| | | At low speed | At high speed |
| *Ambar Yarn* | | | |
| Charkha I | 30 | 14·70 | 16·47 |
| Charkha II | 31 | 14·38 | 16·30 |
| Charkha III | 31 | 15·21 | 16·24 |
| Charkha IV | 31 | 14·30 | 16·21 |
| Charkha V. | 38 | 14·24 | 16·70 |
| Mill Reeling yarn | 32 | 14·13 | 15·98 |
| 20's Mill yarn for Handloom: | | | |
| 65 | 6 | 15·23 | 18·02 |
| 66 | 6 | 13·48 | 15·17 |
| 67 | 6 | 14·80 | 17·96 |
| 68 | 5 | 17·29 | 18·05 |
| 69 | 6 | 14·64 | 15·48 |
| 70 | 6 | 18·73 | 21·21 |
| 71 | 6 | 14·20 | 15·74 |
| 72 | 4 | 13·30 | 16·46 |
| 73 | 12 | 14·97 | 17·48 |
| 74 | 6 | 14·18 | 16·43 |
| 75 | 6 | 15·18 | 18·16 |
| 81 | 13 | 14·47 | 15·92 |

*Yarn irregularity was tested on a Fielden Walker Irregularity Tester.
Low speed : 5 ft./min. High speed : 50 ft./min.

## TABLE VI

### *Average Turns per Inch and its coefficient of variation in the Ambar and the Mill Yarn*

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| Yarn particulars | No. of tests | Average turns per inch | Coefficient of variation in turns per inch |
|---|---|---|---|
| *Ambar Yarn* | | | |
| Charkha I . | 34 | 21·1 | 22·18 |
| Charkha II. | 45 | 18·8 | 18·60 |
| Charkha III | 45 | 18·0 | 25·18 |
| Charkha IV | 45 | 19·3 | 20·72 |
| Charkha V. | 45 | 18·6 | 16·86 |
| Mill Reeling Yarn | 90 | 19·8 | 18·83 |
| 20's Mill Yarn for Handloom: | | | |
| 65 | 23 | 20·8 | 19·44 |
| 66 | 21 | 19·7 | 18·05 |
| 67 | 23 | 19·3 | 38·62 |
| 68 | 28 | 20·1 | 17·90 |
| 69 | 21 | 18·7 | 13·58 |
| 70 | 22 | 22·1 | 26·51 |
| 71 | 22 | 18·8 | 13·66 |
| 72 | 29 | 21·9 | 17·21 |
| 73 | 24 | 20·1 | 16·20 |
| 74 | 24 | 18·6 | 13·18 |
| 75 | 22 | 18·3 | 13·66 |

## TABLE VII

### *The number of continuous winding breaks* observed with the Ambar and the Mill Yarns under High Constant Tension*

| Yarn particulars | Breaks per pound of yarn wound |
|---|---|
| ***Ambar Yarn*** | |
| Charkha I | 116 |
| Charkha II | 97·9 |
| Charkha III | 81·5 |
| Charkha IV | 101·8 |
| Charkha V | 84·5 |
| Mill Yarn | 91·4 |
| 20's Mill Yarn for Handloom | |
| 65 | 156·7 |
| 66 | 137.8 |
| 67 | 102·4 |
| 68 | 121·5 |
| 69 | 111·1 |
| 70 | 110·3 |
| 71 | 115·7 |
| 72 | 116·8 |
| 73 | 146·8 |
| 74 | 115·2 |
| 75 | 102·6 |

*Rate of winding : 110 yds./min. on the Atwood Redraw Machine.

## TABLE IX

### *Preparatory and weaving performances of the Ambar and the Mill Reeling Yarns*

| | First Set* | | Second Set* | |
|---|---|---|---|---|
| | Mill Reeling yarn | Ambar yarn | Mill Reeling yarn | Ambar yarn |
| Period | 14th to 22nd February 56 | 17th to 23rd February 56 | 24th to 27th February 56 | 28th Feb. to 1st March 56 |
| Number of hanks used for warp | 32 | 27 | 28 | 30 |
| Number of hanks used for weft | 28 | 23 | 27 | 29 |
| Breaks per hank of warp while winding prior to warping | 3·8 | 3·5 | 3·2 | 2·9 |
| Breaks per hank of warp while warping | 0·28 | 0·26 | 0·14 | 0 |
| Breaks per hank of warp while sizing | 0·47 | 0·11 | 0·36 | 0·37 |
| Breaks per hank of weft while filling pirns | 3·4 | 2·1 | 3·7 | 2·3 |
| Length of cloth woven in yards | 13·75 | 11·75 | 11·75 | 12·0 |
| Time for weaving | 9 hrs. | 6 hrs. | 7·5 hrs. | 7·25 hrs. |
| Rate of weaving : Yds., per hour (*i*) | 1·53 | 1·96 | 1·57 | 1·66 |
| (*ii*) | 0·63 | 0·70 | 0·59 | 0·60 |
| Breaks per loom hour | 0·55 | 0 | 0·40 | 0·55 |
| Ends/picks | 46/46 | 46/46 | 46/46 | 46/46 |

(*i*) Only weaving*; (*ii*) Weaving including preparatory processes.

*In the first set, the Ambar and Mill Reeling Yarns were woven on the handloom by one Weaver, while in the Second Set another Weaver worked on the same loom with a second pair of the Ambar and the Mill Yarns.

## TABLE X

*Percent waste removed in the Dhunai Madhia and the Belni*

| Machine | Minimum | Maximum | Average percent waste |
|---|---|---|---|
| Dhunai Modhia . . . . . . . . | 5·6 | 11·7 | 8·2 |
| Belani I . . . . . . . . . | 3·0 | 10·2 | 5·4 |
| „ II . . . . . . . . . | 2·1 | 6·7 | 4·3 |
| „ III . . . . . . . . . | 2·4 | 11·8 | 5·7 |
| „ IV . . . . . . . . . | .. | 5·3 | 4·1 |
| „ V . . . . . . . . . | 2·9 | 7·5 | 5·1 |
| Average . . . . . . . . . | 2·1 | 8·3 | 4·9 |

*Percent waste in processes preparatory to weaving*

| Particulars | I Set | | II Set | |
|---|---|---|---|---|
| | Mill Reeling yarn | Ambar yarn | Mill Reeling yarn | Ambar yarn |
| Waste of warp and weft (During warping and weft filling respectively). | 0·78 | 0·75 | 0·80 | 0·59 |

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## TABLE VIII (A)

### INDIVIDUAL RECORDS

*Variation factors with three workers and three charkhas during three days*

| | WORKER N | | | | WORKER B | | | | WORKER J | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Charkha No. | Yarn quality | | | Charkha No. | Yarn quality | | | Charkha No. | Yarn quality | | |
| | | Count | Strengh | Irregularity | | Count | Strength | Irregularity | | Count | Strength | Irregularity |
| First day 9-2-1956. | C IV | 19·8 | 84·4 | 13·04 | C III | 21·0 | 80·5 | 14·13 | C V | 20·2 | 89·8 | 14·79 |
| Second day 10-2-1956. | C V | 18·9 | 86·9 | 14·89 | C IV | 19·8 | 77·6 | 12·89 | C III | 18·9 | 100·0 | 13·73 |
| Third day 11-2-1956. | C III | 19·4 | 85·7 | 13·76 | C V | 19·3 | 84·1 | 14·44 | C IV | 19·2 | 87·3 | 13·36 |

## TABLE VIII (B)

*Significant Test between individuals, Machines and Days*

| Worker | Count | Corrected strength | Irregularity | Charkha sets | Count | Corrected strength | Irregularity | Days | Count | Corrected strength | Irregularity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N | 19·7 | 81·9 | 13·9 | III | 19·8 | 87·1 | 14·1 | 1 | 20·3 | 86·9 | 14·2 |
| B | 20·0 | 80·9 | 14·0 | IV | 19·6 | 80·8 | 13·1 | 2 | 19·2 | 83·2 | 13·8 |
| J | 19·4 | 88·7 | 14·0 | V | 19·5 | 83·7 | 14·7 | 3 | 19·3 | 81·4 | 13·9 |

## TABLE XI (A)

*Average percent time spent by each worker on the* Belani *and the Charkha allotted to him in 7½ hours daily working*

| Worker on | Percent time spent on | | | | | | |
|---|---|---|---|---|---|---|---|
| | Belani (Processing) | Maintenance | Misc. | Charkha (Processing) | Maintenance | Misc. | Rest |
| *Charkha II . . . . | 40·2 | 4·0 | 3·2 | 21·5 | 4·6 | 7·0 | 19·5 |
| Charkha III . . . . | 50·5 | 2·5 | 5·7 | 16·5 | 1·0 | 6·7 | 17·1 |
| Charkha IV . . . . | 44·2 | 4·4 | 3·8 | 20·1 | 3·1 | 6·1 | 18·3 |
| Charkha V . . . . | 41·9 | 1·7 | 6·3 | 19·5 | 1·9 | 8·1 | 20·6 |
| Average . . . . | 44·2 | 3·1 | 4·8 | 19·4 | 2·6 | 7·0 | 18·9 |

*Charkha I omitted because the worker concerned attended also to other supervision duties.

## TABLE XI (B)

*Amount of time spent at various stages in spinning and weaving*

### Spinning

12. lbs. *Vijay* cotton spun to 20's count during 12 days from January 30, to February 11, 1956. Effective operative hours and percentage of time spent in processing 1 lb. cotton.

| Operation | No. of Machines | No. of workers | Effective operative hours | | | Avearge percentage time |
|---|---|---|---|---|---|---|
| | | | Minimum | Maximum | Average | |
| (1) Opening on Dhunai Modhia . | 1 | 1 | 5·9 | 8·2 | 7·2 | 24·9 |
| (2) Drawing to roving on Ambar Belani | 5 | 5 | 10·8 | 13·9 | 12·7 | 43·8 |
| (3) Spinning on Ambar Charkha . | 5 | | 6·6 | 11·9 | 8·8 | 30·4 |
| (4) Reeling one hank of 20's yarn . | 1 | 1 | .. | .. | 0·25 | 0·9 |

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### WEAVING

25 yds. of cloth with 46/46 reeds and picks and woven from 20's count Ambar yarns by two workers on one handloom.

Percent time spent to weave 25 yds. cloth.

| Operation | Average percentage time |
|---|---|
| 1. Winding prior to warping . . . . . . . . | 12·4 |
| 2. Warping . . . . . . . . . . . | 16·2 |
| 3. Warp Tieing . . . . . . . . . . | 11·2 |
| 4. Sizing . . . . . . . . . . . | 6·9 |
| 5. Weft filling . . . . . . . . . . | 16·5 |
| 6. Weaving . . . . . . . . . . . | 36·0 |
| 7. Miscellaneous . . . . . . . . . . | 0·8 |

## TABLE XII (A)

### YARN PRODUCTION ON AMBAR CHARKHA

*Effective time required, in Hours, to process one pound of cotton through*

(1) Dhunai Modhia (Cleaning & Opening)
(2) Belani (Drawing & Roving) and
(3) Charkha (Spinning).

| (1) Dhunai Modhia | | | | (2) Ambar Belani | | | | (3) Ambar Charkha | | | | (2) (3) A.B. A.C. | | | | (1) (2) (3) D.M. A.B. A.C. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker No. | Min. Hrs. | Max. Hrs. | Avg. Hrs. | Worker No. | Min. Hrs. | Max. Hrs. | Avg. Hrs. | Worker No. | Min. Hrs. | Max. Hrs. | Avg. Hrs. | Worker No. | Min. Hrs. | Max. Hrs. | Avg. Hrs. | Worker No. | Min. Hrs. | Max. Hrs. | Avg. Hrs. |
| 1 | 5·5 | 8·2 | 7·2 | | 6·9 | 16·0 | 10·8 | 1 | 4·5 | 14·0 | 9·2 | 1 | 11·4 | 29·6 | 20·0 | 1 | 17·3 | 37·8 | 27·2 |
| | | | | 2 | 8·3 | 20·0 | 13·4 | 2 | 7·5 | 21·3 | 11·9 | 2 | 15·8 | 40·9 | 25·3 | 2 | 21·7 | 49·1 | 32·5 |
| | | | | 3 | 5·2 | 20·5 | 13·6 | 3 | 3·7 | 11·8 | 7·8 | 3 | 8·9 | 31·9 | 21·4 | 3 | 14·8 | 40·1 | 28·6 |
| | | | | 4 | 8·3 | 20·4 | 13·9 | 4 | 4·2 | 11·4 | 8·5 | 4 | 12·5 | 31·4 | 22·4 | 4 | 18·4 | 39·6 | 29·6 |
| | | | | 5 | 9·0 | 16·1 | 12·0 | 5 | 4·4 | 10·4 | 6·6 | 5 | 13·4 | 26·1 | 18·6 | 5 | 19·3 | 34·3 | 25·8 |

## TABLE XII (B)

### *Number of Hanks of 20's count produced for Eight Hours Effective Working*

| | Processes 1, 2 and 3 opening and cleaning to spinning | | | Processes 2 and 3 lap to spinning | | | Process 3, spinning on Ambar Charkha only | | |
|---|---|---|---|---|---|---|---|---|---|
| Worker No. | Minimum Hank | Maximum Hank | Average Hank | Minimum Hank | Maximum Hank | Average Hank | Minimum Hank | Maximum Hank | Average Hank |
| 1 | 4·2 | 9·2 | 5·9 | 5·4 | 14·0 | 8·0 | 11·4 | 35·6 | 17·4 |
| 2 | 3·3 | 7·4 | 4·9 | 3·9 | 10·1 | 6·3 | 7·5 | 21·3 | 13·4 |
| 3 | 4·0 | 10·8 | 5·6 | 5·0 | 18·0 | 7·5 | 13·6 | 43·2 | 20·5 |
| 4 | 4·0 | 8·7 | 5·4 | 5·1 | 12·8 | 7·1 | 14·0 | 38·1 | 18·8 |
| 5 | 4·7 | 8·3 | 6·2 | 6·1 | 11·9 | 8·6 | 15·4 | 36·4 | 24·2 |

## TABLE XII (C)

### *Individual and Average Daily Charkha Production (effective Hours/lb. and Hanks/8 effective hours on Charkha only) of 20's yarn for 12 days.*

| Worker | W1 | W2 | W3 | W4 | W5 | Total | Hrs/b.X1/5 (Avg.) | Hanks per 8 hours | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Min. | Max. | Avg. |
| Jan. 30 . . | 5·3 | 9·5 | 10·5 | 10·0 | 10·4 | 45·7 | 9·1 | 15·2 | 30·2 | 17·6 |
| 31 . . | 14·0 | 13·7 | 7·2 | 7·7 | 6·9 | 49·5 | 9·9 | 11·4 | 23·2 | 16·2 |
| Feb. 1 . . . | 12·0 | 8·7 | 9·3 | 11·4 | 7·0 | 48·4 | 9·7 | 13·3 | 22·8 | 16·5 |
| 2 . . . | 12·2 | 7·5 | 11·8 | 10·7 | 6·5 | 48·7 | 9·7 | 13·1 | 24·6 | 16·5 |
| 3 . . . | 6·6 | 8·3 | 7·8 | 7·0 | 6·2 | 35·9 | 7·2 | 19·3 | 25·8 | 22·2 |
| 4 . . . | 10·3 | 20·6 | 11·0 | 9·8 | 6·7 | 58·4 | 11·7 | 7·8 | 23·9 | 13·7 |
| 5 . . . | .. | 21·3 | 3·7 | 6·7 | 6·0 | 37·7 | 9·4* | 7·5 | 43·2 | 17·0 |
| 7 . . . | 4·5 | 10·2 | 4·6 | 10·3 | 5·0 | 34·6 | 6·9 | 15·4 | 35·6 | 23·2 |
| 8 . . . | 12·2 | 10·7 | 7·8 | 10·0 | 6·9 | 47·6 | 9·5 | 13·1 | 23·2 | 16·8 |
| 9 . . . | 9·9 | 9·6 | 8·1 | 8·0 | 6·0 | 41·6 | 8·3 | 16·2 | 26·7 | 19·3 |
| 10 . . . | 8·4 | 10·6 | 3·9 | 6·8 | 7·6 | 37·3 | 7·5 | 15·1 | 41·0 | 21·3 |
| 11 . . . | 6·5 | 12·0 | .. | 4·2 | 4·4 | 27·1 | 6·8* | 13·3 | 38·1 | 23·5 |

* X1/4

Reference Fig. 1

## TABLE XII (D)

*Individual and Average daily Belani and Charkha Production (Effective Hours/lb. and Hanks/8 Effective Hours) of 20's yarn for 12 days.*

| Workers | W 1 | W 2 | W 3 | W 4 | W 5 | Total | Average Hrs./lb. | Hanks per 8 hrs. | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Min. | Max. | Avg. |
| Jan. 30 . . | 16·0 | 23·7 | .. | 30·4 | 23·7 | 93·8 | 23·4 | 5·3 | 10·0 | 6·8 |
| 31 . . | 30·0 | 27·9 | 12·4 | 22·8 | 21·6 | 114·7 | 22·9 | 5·3 | 13·0 | 7·0 |
| Feb. 1 . . | 25·0 | 19·1 | 29·8 | 25·5 | 18·9 | 118·3 | 23·7 | 5·4 | 8·5 | 6·8 |
| 2 . . | 25·9 | 20·4 | 26·0 | 24·4 | 16·4 | 113·1 | 22·6 | 6·2 | 9·8 | 7·1 |
| 3 . . | 19·0 | 28·3 | 21·0 | 19·3 | 15·6 | 103·2 | 20·6 | 5·6 | 10·2 | 7·8 |
| 4 . . | 17·8 | 30·7 | 27·9 | 18·1 | 15·9 | 110·4 | 22·1 | 5·6 | 10·1 | 7·2 |
| 6 . . | .. | 33·3 | 17·3 | 18·9 | 15·0 | 84·5 | 21·1 | 4·8 | 10·7 | 7·6 |
| 7 . . | .. | 23·5 | 16·1 | .. | 18·7 | 58·3 | 19·4 | 7·8 | 9·9 | 8·2 |
| 8 . . | .. | 22·9 | 18·6 | 25·1 | 17·9 | 84·5 | 21·1 | 7·4 | 8·9 | 7·6 |
| 9 . . | 18·0 | 25·3 | 21·8 | 22·2 | 18·6 | 105·9 | 21·2 | 6·3 | 8·9 | 7·5 |
| 10 . . | 15·3 | 18·9 | 15·9 | 21·3 | 21·1 | 92·5 | 18·5 | 8·5 | 10·4 | 8·6 |
| 11 . . | 15·4 | .. | .. | 15·8 | 16·1 | 47·3 | 15·7 | 9·9 | 10·4 | 10·2 |

Reference Fig. 2.

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## TABLE XII (E)

*The daily Dhunai Modhia Production in Effective hours/lb. and Individual and Average Daily Total Production (Processes* 1 2 3 *effective hours/lb and Hanks/8 effective hours) of* 20*'s yarn for* 12 *days.*

| Worker | Dhunai Modhia Hours/ lb. | (1) Dhunai Modhia | | (2) Ambar Belani | | (3) Ambar | | Charkha-Hours/lb. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | W 1 | W 2 | W 3 | W 4 | W 5 | Total | Hours/lb | | | Hanks per 8 hours | | |
| | | | | | | | | Min. | Max. | Average | Min. | Max. | Average |
| Jan. 30 . . . . . | 7·6 | 23·6 | 31·3 | .. | 38·0 | 31·3 | 124·2 | 23·6 | 38 | 31·0 | 4·2 | 6·8 | 5·2 |
| 31 . . . . . | 7·3 | 37·3 | 35·2 | 19·7 | 30·1 | 28·9 | 151·2 | 19·7 | 37·3 | 30·2 | 4·3 | 8·1 | 5·3 |
| Feb. 1 . . . . . | 7·5 | 32·5 | 26·6 | 37·3 | 33·0 | 26·4 | 155·8 | 26·4 | 37·3 | 31·2 | 4·3 | 6·1 | 5·1 |
| 2 . . . . . | 7·8 | 33·7 | 28·2 | 33·8 | 32·2 | 24·2 | 152·1 | 24·2 | 33·8 | 30·4 | 4·7 | 7·6 | 5·3 |
| 3 . . . . . | 6·7 | 25·7 | 35·0 | 27·7 | 26·0 | 22·3 | 136·7 | 22·3 | 35·0 | 27·3 | 4·6 | 7·2 | 5·9 |
| 4 . . . . . | 8·2 | 26·0 | 38·9 | 36·1 | 26·3 | 24·1 | 151·4 | 24·1 | 38·9 | 30·3 | 4·1 | 7·6 | 5·3 |
| 6 . . . . . | 6·8 | .. | 40·1 | 24·1 | 25·7 | 21·8 | 111·7 | 21·8 | 40·1 | 27·9 | 4·0 | 7·3 | 5·7 |
| 7 . . . . . | 5·9 | .. | 29·4 | 22·0 | .. | 24·6 | 76·0 | 22·0 | 29·4 | 25·3 | 5·4 | 7·2 | 6·3 |
| 8 . . . . . | 6·8 | .. | 29·7 | 25·4 | 31·9 | 24·7 | 111·7 | 24·7 | 31·9 | 27·9 | 5·0 | 6·5 | 5·7 |
| 9 . . . . . | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 10 . . . . . | 7·2 | 22·5 | 26·1 | 23·1 | 28·5 | 28·3 | 128·5 | 22·5 | 28·5 | 25·7 | 5·6 | 7·1 | 6·2 |
| 11 . . . . . | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

Reference Fig. 3

## Daily Production Record Forms for the Ambar Charkha Workers

*Material particulars and production, time records for opening, carding, drawing, spinning and reeling.*

### FORM 'A' OPENING AND CARDING

(*a*) Hand Ginning, Hand opening and Bow Carding for the Seed Cotton (32's)

| Date | Cotton | Weight in Tolas & Annas | | | | Time in hours and minutes | | | | | | No. of laps made | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Kapas | Seed | Lint | Waste percent | Weighing | Cleaning | Ginning | Bow Carding | Lap making | Total production time | | |
| | | T.A. | T.A. | T.A. | T.A. | Hr. Min. | Hr. Min. | Hr. Min. | Hr. Min. | Hr. Min. | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | | | | | | | | | | | | | |

(b) *Dhunai modhia opening and carding for the Baled Cotton* (12*'s and* 20*'s*)

| Date | Cotton | Weight in Tolas and Annas | | | | | | | Time in Hours and Minutes | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Wt. of Cotton | Cleaning and predrawing waste | Carding | | | | Per cent waste | Hand cleaning beating preparation | Predrawing | | Carding | Repairs | Total time | Remarks |
| | | | | Lap fed | Cotton delivered | Waste percent | Total waste | | | No. of passages | Time | | | | |
| | | T.A. | T.A. | T.A. | T.A. | T.A. | T.A. | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | |

## FORM 'B' DRAWING—ROVING ON BELANI

| Date | No. of laps. | Weight in Tolas & Annas | | | | Per cent Waste | Time in Hours and Minutes | | | | | Total time | Roving hank | Belani draft | Process sequence and Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Laps | Rovings | 10 Yds. Roving | Waste | | Laping Drawing | Roving | Rest | Repairs | Misc. time | | | | |
| | | T. A. | T. A. | T. A. | T. A. | | Hr. Min. | Hr. Min. | Hr. Min. | Hr. Min. | Hr. Min. | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

## FORM 'C' SPINNING ON CHARKHA

| Date | Roving Weight | Time in Hours and Minutes | | | | | | No. of doffs | No. of bobbins | Draft | Spindle Breaks | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Roving dividing weighing | Spinning | Repairs | Rest | Misc. | Total time | | | | Spindle 1 | Spindle 2 | Spindle 3 | Spindle 4 |
| | T. A. | | | | | | | | | | 1*2*3*4* | 1*2*3*4* | 1*2*3*4* | 1*2*3*4* |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

1* Spindle Break ; 2* Roller lap ; 3* Traveller Break ; 4* Multiple Break

## FORM 'D' REELING

| Date | No. of bobbins for reeling | Total No. of hanks made | Weight of hanks | Weight of waste | Percent waste | Hanks for testing Hanks | Hanks for weaving | No. of breaks | No. of knots | Misc. time | Time for reeling | Total time | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

## V

## *REPORT ON THE EXPERIMENTS CARRIED OUT ON "AMBAR CHARKHA" AT THE TECHNOLOGICAL LABORATORY, MATUNGA, BOMBAY 19.*

### INTRODUCTION

In order to ascertain the spinning performance of the "Ambar Charkha" with different types of cottons, experiments were undertaken at the Technological Laboratory, at the request of the Textile Commissioner, Ministry of Commerce and Industry, Government of India.

The All India Khadi and Village Industries Board delivered a complete set of Ambar Charkha by about the first week of August, 1955. The details of the processing and the nature of performance tests that had to be undertaken were not, however, available till the middle of August, 1955. After discussion with a representative of the Textile Commissioner, Bombay, a comprehensive scheme was drawn up, as incorporated in his letter No. P. & F/UNEC/15/892, dated the 22nd/23rd August, 1955, which is given in Annexure I. This covered only the brief outlines of the experiments, but the details of processing and the procedure to be adopted for the various tests had to be decided upon. For this purpose, a discussion was held at the Technological Laboratory, during the first week of October, 1955, when representatives of the All India Khadi Board and the Textile Commissioner were present, and details of the processes for testing the performance of the Ambar Charkha were settled. (Pl. see *Annexure II*). Till the details of processing and the cottons to be tested were decided after the receipt of the Ambar Charkha Unit at the Laboratory, preliminary trials were carried out on eight cottons. Regular experiments were, however, commenced by about the first week of October and carried on till about the 17th January, 1956; these have since been discontinued as the representative of the Khadi Board, who was operating the unit, absented himself and no substitute has been sent by the Khadi Board till now. Consequently, further work, *viz.,* (i) production of sufficient quantity of yarn for weaving, (ii) study of the weavibility of the yarns by preparing a fabric in a hand-loom, and (iii) the determination of the fabric quality, could not be undertaken. The present report therefore, covers the work done so far.

### MATERIALS AND METHODS

(a) *Material:*

Practically all the important varieties of cotton grown in the various States in the Indian Union were selected for tests. Samples were taken from the stock which was available at the Laboratory and on which spinning and other tests had been conducted earlier. A list of these cottons together with their chief fibre properties are given below:—

*List of cottons tested*

| Laboratory Sample No. | Name of cotton | Place of growth | Mean fibre-length (inch) | Mean fibre-weight per inch (10-6 oz.) |
|---|---|---|---|---|
| 14890 | Matheo | Saurashtra | 0·72 | 0·212 |
| 14771 | 35/1 | Uttar Pradesh | 0·77 | 0·224 |
| 14880 | Vijay | Middle Gujrat | 0·92 | 0·175 |
| 14786 | Gaorani 6 | Hyderabad | 0·81 | 0·175 |
| 14975 | H. 420 | Madhya Pradesh | 0·87 | 0·179 |
| 14500 | Jarilla | Khandesh | 0·84 | 0·155 |
| 14835 | Laxmi | Karnatak | 0·89 | 0·115 |
| 14991 | Co. 2 | Coimbatore | 0·87 | 0·136 |
| 15012 | K. K. 2 | Koilpattia | 0·86 | 0·176 |
| 14976 | Buri 0394 | Madhya Pradesh | 0·93 | 0·146 |
| 14836 | M.A.5. | Mysore State | 0·96 | 0·131 |
| 15011 | M.C.U. 1 | Srivilliputhur | 0·94 | 0·134 |

(b) ***Methods*:**

The counts to which each cotton was spun is given below:—

| Cotton | Counts of yarn spun |
|---|---|
| Matheo | 10s and 14s |
| 35/1 | Do. |
| Vijay | 20s and 30s |
| Gaorani 6 | Do. |
| H. 420 | Do. |
| Jarila | Do. |
| Laxmi | Do. |
| Co. 2 | Do. |
| K. 2 | Do. |
| Buri 0394 | 30s |
| M. A. 5 | Do. |
| Madras Cambodia Uganda 1 | Do. |

As regard the treatment for spinning 10s to 30s counts the following processes were employed:—

(1) Beating on a jally (Gauze)
(2) Bowing (Madhyam Pinjan)
(3) Carding (Dhunai Modhia)
(4) Ambar Belni (Sliver Preparer)
(5) Ambar Charkha (Ring Frame).

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The first two processes were left to the discretion of the worker concerned, but the next three were adopted for all the cottons for spinning the counts ranging from 10s to 30s from the machine-ginned lint available at the Laboratory. Further, the number of passages of the lap through the Ambar *Belni* was kept within the range of 4 to 8 and that for the preparation of the roving between 3 to 5 passages.

Further, the following cottons were spun to 40s and 50s counts, as noted against each, but the starting material was seed—cotton (kapas): —

| Cotton | Counts spun |
|---|---|
| Vijay | 40s |
| Laxmi | 40s |
| Buri 0394 | 40s and 50s |
| M.A. 5 | 40s and 50s |
| Madras Cambodia Uganda 1 | 40s and 50s |

For these cottons, the following processes were employed:—

Ginning seed-cotton by "Salia Patri" and the lint obtained was subjected to: —

(1) Bowing (Madhyam Pinjan)

(2) Ambar *Belni*, and

(3) Ambar Charkha (Ring Frame).

*Atmospheric conditions prevailing during the experiments.—*

All the experiments were conducted in a room where there was no control of relative-humidity and temperature.

The yarns spun were wet-reeled and allowed to dry in the room. Before the yarn tests were conducted, the yarns were conditioned for over a day at standard conditions of relative-humidity (65 per cent.) and temperature (82°F.).

*Items recorded:*

Complete details of the time taken for each process, speeds, and settings employed in each machine, and waste at every stages were recorded by an observer.

*Details of fibre and yarn tests.—*

(a) *Fibre tests.*—The mean fibre-length of samples before and after carding (*Dhunai Modhia*) were determined on Balls Sorter.

(b) *Yarn tests.*—The following yarn tests were made:—

(1) Lea strength;

(2) Single-thread strength and extension;

(3) Twist; and

(4) Evenness and neppiness of yarn.

*Lea tests.*—20 to 25 leas were tested for each count.

*Single-thread strength and turns per inch.*—200 single-thread tests and 200 twist tests were done for each yarn; the former on Goodbrand tester on 12″ lengths and the latter on "Rockbank" tester on 1/3″ lengths.

*Yarn evenness and neppiness.*—These were examined by the usual visual methods on black board.

## RESULTS AND DISCUSSION OF RESULTS

(a) *Spinning Processes*:

The results obtained from the tests carried out on the lines indicated above are given in Table I and these are self-explanatory. Nevertheless, a few salient points will be given here:

*Production of Yarn.*—It will be seen from column 15 of Table IA that the production per spindle per day of 8 hours on the Ambar Charkha is, on an average, 4·1 hanks (3·3 ozs.) and 3 hanks (1·61 ozs.) for 20s and 30s counts respectively. If, however, the production is reckoned on the total actual working hours upto the spindle point, based on figures entered in column 7, the production per spindle per 8 hours upto spindle point is reduced to 1·3 hanks (1·05 ozs.) and 1·1 hanks (0·61 ozs.) for 20s and 30s respectively. Furthermore, if the reeling time is also included, *i.e.*, if the actual working period taken for converting the lint into yarn including the time required for reeling is taken, there is a further reduction in the production figures, which now work out to be 1·1 hanks (0·92) ozs.) and 1 hank (0·53 ozs.) for 20s and 30s respectively.

*Waste.*—It is, however, to be noted that the lint, taken as the starting material, was that which was opened by beating on the jally, during which operation some of the dirt and trash was removed. The weight of lint taken for each sample is given in column 8 of Table 1A. Basing the percentage on this figure, the wastage during the entire processing is given in column 12, from which it will be seen that this figure varied from 6·2 per cent. to 26·6 per cent. depending upon the cotton and the treatment.

*Yarn breakages during spinning.*—As could be expected, breakages during the spinning on the Ambar Charkha were more for the higher counts than for the lower, when spun from the same cotton. In certain cottons, as for example, H. 420, *Jarila*, *Buri* 0394 and *Matheo*, the end breakages were rather numerous.

*Reeling breakages.*—Though the yarns were wet-reeled, the reeling breakages, which were recorded for a few cottons, were fairly high for M.C.U.1, M.A.5, Buri 0394, *Jarila* and *Matheo*. This, of course, would result in knots at frequent intervals.

It will be seen from the record note of the discussion (*Annexure* II) that for spinning higher counts from the same cotton, the Khadi Board representative desired to use seed-cotton (kapas). The results obtained for those cottons for which the starting material was kapas are given in Table 1B.

One important point worthy of note in this connection is that the worker rejected a good amount of kapas which were undeveloped (immature) or stained and/or damaged otherwise. This amounts to the selection of good fibres for spinning higher counts.

The production per spindle per day of 8 hours is, on an average, 4·3 hanks (1·72 ozs.) for 40s counts. As will be seen from the last column of Table 1B, the production per man-hour including the time taken for reeling is, on an average, one hank (0·40 ozs.) for 40s and 0·9 hanks (0·29 ozs.) for 50s. It may, however, be remarked that the number of tests for 50s counts is too few and has, therefore, not been taken into account.

(b) *Yarn Test Results.*—

The yarn test results are given in Table II. It will be seen from the values given in this table that as many as 29 counts ranging from 10s to 50s for 12 varieties of cottons were tested for yarn-properties.

*Lea Tests.*—The actual counts obtained, lea strength and count-strength product are given in columns 5, 7 and 10 of Table II.

(a) *Counts.*—The difference between the actual count obtained and the nominal count is given in column 6 of Table II. It may be noticed that the variation ranged from 0 to 10 per cent. except in 3 cases; it was less than 5 per cent. in 15 cases. It may, therefore, be observed that the average variation was well within the limits of tolerance in at least half the number of samples tested.

(b) *Lea strength.*—The highest and the lowest values of lea strength obtained for each yarn are given in columns 8 and 9. It will be observed from these values that for a few cottons, *viz.*, K. 2-20s, 35/1-14s, and *Vijay*-20s, the range of variation is fairly wide.

For comparative purposes, the following two tables have been constructed, using the values given in Table II. Table III contains the lea strength values corrected to nominal counts for the coarse counts 10s and 14s and Table IV for counts 20s, 30s, 40s and 50s. The standards of lea strengths laid down by the Textile Commissioner for reeling yarns are also given in these tables:—

*Table III.—Lea Strength (lbs.) for 10s and 14s.*

| Cotton | Lea strength (lbs.) for 10s | Lea strength (lbs.) for 14s |
|---|---|---|
| Mathew Local . . . . . . . . . . | 68·9 | 34·9 |
| 35/1 . . . . . . . . . . . . . . | 97·1 | 57·0 |
| N.B.—Hand-loom standards :<br>(laid down by Textile Commissioner) . . . . . | 80 lbs. | 78·6 lbs. |

*Table IV.—Lea Strength (lbs.) for 20s, 30s, 40s and 50, counts.*

| Cotton | Lea-strength (lbs.) for | | | |
|---|---|---|---|---|
| | 20s | 30s | 40s* | 50s* |
| Gaorani 6 | 75·2 | 35·7 | .. | .. |
| Vijay | 79·1 | 43·4 | 34·4 | .. |
| H 20 | 41·4 | 30·1 | .. | .. |
| Jarila | 60·2 | 39·1 | .. | .. |
| Laxmi | 76·0 | 42·1 | 40·8 | .. |
| Co. 2 | 53·7 | 32·0 | .. | .. |
| K. 2 | 63·4 | 35·6 | .. | .. |
| Buri 0394 | .. | 28·5 | 31·5 | 27·3 |
| M. A. 5 | .. | 19·1 | 31·1 | 22·4 |
| M. C. U. 1 | .. | 37·6 | 34·8 | 29·3 |

N.B. (1) Hand-loom Standards 60 lbs for 20s 40 lbs. for 30s 32·5 lbs. for 40s

(2) *Starting material was kapas in these cases.

It will be seen from the values given in Table III above that the 14s yarns did not come upto the strength standard. In the 20s, yarns, the strength obtained is below the standard in only one case. Out of the 10 samples spun into 30s, only 2 had lea-strengths slightly greater than the standard strength. As stated above, 40s, and 50s yarns were prepared from lint obtained from hand-ginning the *selected* kapas. It is noteworthy that all the 5 samples that were spun into 40s gave the requisite strength. The standard for 50s reeled yarn is not available. It should, however, be noted that *Buri* 0394 and M.A. 5 which failed to come up to the requisite standard of lea strength in the 30s counts, yielded stronger yarns in 40s counts, which are more or less equal to the standard. This is probably due to the fact that the latter counts were spun from good quality lint ginned by hand from selected kapas. Generally speaking, the results show that the requisite lea strength is realised in 20s and 40s yarns in the present experiments.

*Comparison between yarn spun on the Ambar Charkha and that spun on mill machinery at the Laboratory.*—The comparative values of lea strength are given in the following table:—

TABLE V.—*Comparative values of lea strength (lbs.) for Ambar Charka spun and Laboratory spun yarns*

| Cottons | 10s | | 14s | | 20s | | 30s | | 40s | | 50s | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Charkha yarn | Laboratory spun yarn | Charkha yarn | Lab. spun yarn | Charkha yarn | Lab. spun yarn | Charkha yarn | Lab. spun yarn | Charkha yarn | Lab. spun yarn | Charkha yarn | Lab. spun yarn |
| Matheo Local | 68·9 | 100·4 | 34·0 | 55·1 | .. | .. | .. | .. | .. | .. | .. | .. |
| 35/1 | 97·1 | .. | 57·0 | 87·2 | .. | .. | .. | .. | .. | .. | .. | .. |
| Gaorani 6 | .. | .. | .. | .. | 75·2 | 99·6 | 35·7 | 52·6 | .. | .. | .. | .. |
| Vijay | .. | .. | .. | .. | 79·1 | 114·0 | 43·4 | 66·4 | 34·4 | 41·8 | .. | .. |
| H. 420 | .. | .. | .. | .. | 41·4 | 82·1 | 30·1 | 43·3 | .. | .. | .. | .. |
| Jarila | .. | .. | .. | .. | 60·2 | 98·6 | 39·1 | 54·2 | .. | .. | .. | .. |
| Laxmi | .. | .. | .. | .. | 76·0 | 111·4 | 42·1 | 64·2 | 40·8 | 43·1 | .. | .. |
| Co. 2 | .. | .. | .. | .. | 58·7 | 99·5 | 32·0 | 55·9 | .. | .. | .. | |
| K. 2 | .. | .. | .. | .. | 63·4 | 85·2 | 35·6 | 45·9 | .. | .. | .. | .. |
| Buri 394 | .. | .. | .. | .. | .. | .. | 28·5 | 58·6 | 31·5 | 39·0 | 27·3 | .. |
| M. A. 5 | .. | .. | .. | .. | .. | .. | 19·1 | 49·5 | 31·1 | 32·4 | 22·4 | .. |
| M. C. U. 1 | .. | .. | .. | .. | .. | .. | 37·6 | 72·3 | 34·8 | 47·3 | 29·3 | 34·9 |
| Mean twist factor | 4·9 | 4·0 | 5·0 | 4·0 | 4·86 | 4·0 | 4·80 | 4·0 | 3·90 | 4·0 | 3·75 | 4·0 |

In this connection, two points are to be noted: (i) the Charkha yarns were wet-reeled and allowed to dry and then tested, while the ring-spun yarns (Laboratory) were tested, as usual, without wetting and (ii) The average twist-factor was 4·8 for 20s and 30s for charkha-spun yarns while it was 4 for the other. If the Laboratory-spun yarns had been wet-reeled and tested with a higher twist factor, as for the Carkha yarns, the lea strengths would perhaps have been still higher. Taking the present values, however, it will be observed that the Charkha yarn is, on an average, 65·4, 61:4 and 85·5 per cent. of the Laboratory value for 20s, 30s and 40s respectively.

*Single-thread Tests.*—The counts obtained from single-thread tests closely follow those obtained for lea tests. The values of single-thread strength and extension are summarised in the following table VI.

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TABLE VI.—*Single thread strength (ozs.) and Extension (%) of yarns spun on Ambar Charkha*

| Cotton | 10s | | 14s | | 20s | | 30s | | 40s* | | 50s* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Strength (ozs.) | Extension (%) | Strength (ozs.) | Extension (%) | Strength (ozs.) | Extension (%) | Strength (ozs.) | Extension (%) | Strength (ozs.) | Extension (%) | Sgrength (ozs.) | Extension (%) |
| Matheo Local | 15·7 | 10·0 | 8·2 | 7·5 | .. | .. | .. | .. | .. | .. | .. | .. |
| 35/1 | 15·2 | 8·8 | 11·5 | 7·4 | .. | .. | .. | .. | .. | .. | .. | .. |
| Gaorani 6 | .. | .. | .. | .. | 12·9 | 7·2 | 6·9 | 4·7 | .. | .. | .. | .. |
| Vijay | .. | .. | .. | .. | 14·2 | 5·9 | 6·1 | 4·1 | 5·8 | 4·1 | .. | .. |
| H. 420 | .. | .. | .. | .. | 8·8 | 5·9 | 4·7 | 4·7 | .. | .. | .. | .. |
| Jarila | .. | .. | .. | .. | 11·8 | 5·8 | 3·8 | 4·7 | .. | .. | .. | .. |
| Laxmi | .. | .. | .. | .. | 10·3 | 6·7 | 7·3 | 5·0 | 6·7 | 4·7 | .. | .. |
| Co. 2 | .. | .. | .. | .. | 9·4 | 6·9 | 5·8 | 4·6 | .. | .. | .. | .. |
| K. 2 | .. | .. | .. | .. | 10·7 | 6·4 | 6·0 | 4·3 | .. | .. | .. | .. |
| Buri 0394 | .. | .. | .. | .. | .. | .. | 5·5 | 7·0 | 6·2 | 5·2 | 4·3 | 4·6 |
| M. A. 5 | .. | .. | .. | .. | .. | .. | 7·0 | 7·8 | 6·7 | 5·4 | 4·2 | 6·2 |
| M. C. U. 1 | .. | .. | .. | .. | .. | .. | 6·4 | 5·2 | 6·0 | 4·8 | 4·8 | 4·1 |

* Starting material was kapas in these cases.

Table VII gives the comparative figures for percentage extension of single-thread for yarns spun on the Ambar Charkha and the ring-spun yarns Laboratory:—

TABLE VII.—*Percentage extension of yarns*

| Cotton | 20s | | 30s | | 40s* | | 50s* | |
|---|---|---|---|---|---|---|---|---|
| | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun |
| Gaorani 6 . . | 7·2 | 6·6 | 4·7 | 5·8 | .. | .. | .. | .. |
| Vijay . . | 5·9 | 5·9 | 4·1 | 5·4 | 4·1 | 4·8 | .. | .. |
| H. 420 . . | 5·9 | 6·5 | 4·7 | 5·8 | .. | .. | .. | .. |
| Jarila . . | 5·8 | 6·5 | 4·7 | 5·6 | .. | .. | .. | .. |
| Laxmi . . | 6·7 | 8·2 | 5·0 | 7·2 | 4·7 | 6.6 | .. | .. |
| Co. 2 . . | 6·9 | 6·7 | 4·6 | 5·8 | .. | .. | .. | .. |
| K. 2 . . | 6·4 | 5·4 | 4·3 | 5·0 | .. | .. | .. | .. |
| Buri 0394 . | .. | .. | 7·0 | 6·4 | 5·2 | 5·4 | 4·6 | .. |
| M. A. 5 . . | .. | .. | 7·8 | .. | 5·4 | .. | 6·2 | .. |
| M. C. U. 1 . | .. | .. | 5·2 | 6·0 | 4·8 | 5·7 | 4·1 | 4·8 |
| Mean | 6·4 | 6·5 | 5·2 | 5·9 | 4·8 | 5·6 | .. | .. |

* Starting material was kapas in these cases.

The above results show that generally the yarns spun with the Ambar Charkha gave a somewhat lower extension than those spun on the Laboratory ring frame in the case of 30s and 40s counts.

The strength-irregularity percentages are compared with those of Laboratory-spun yarns in Table VIII.

TABLE VIII.—*Strength-Irregularity percentages of Ambar Charkha-spun and Laboratory-spun yarns*

| Cotton | 20s | | 30s | | 40s* | | 50s* | |
|---|---|---|---|---|---|---|---|---|
| | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun | Charkha-spun | Lab-spun |
| Gaorani 6 . | 13·9 | 11·8 | 19·3 | 13·1 | .. | .. | .. | .. |
| Vijay . . | 17·8 | 9·6 | 17·3 | 10·6 | 15·9 | 12·0 | .. | .. |
| H. 420 . . | 20·6 | 11·4 | 19·4 | 13·6 | .. | .. | .. | .. |
| Jarila . . | 10·4 | 10·6 | 23·9 | 11·7 | .. | .. | .. | .. |
| Laxmi . . | 12·2 | 8·9 | 16·4 | 11·1 | 10·2 | 13·4 | .. | .. |
| Co. 2 . . | 14·9 | 9·8 | 18·9 | 13·3 | .. | .. | .. | .. |
| K. 2 . . | 14·7 | 11·5 | 20·5 | 13·6 | .. | .. | .. | .. |
| Buri 0394 . | | .. | 16·8 | 11·4 | 17·1 | 12·8 | 15·0 | .. |
| M. A. 5 . | .. | .. | 17·3 | .. | 11·8 | .. | 21·9 | .. |
| M.C.U. 1 . | .. | .. | 18·6 | 11·0 | 15·2 | 13·4 | 16·0 | 14·5 |
| Mean . . | 14·9 | 10·5 | 18·8 | 12·2 | 14·0 | 12·9 | ... | .. |

* Starting material was kapas in these cases.

It will be seen from the above values that in almost all cases the charkha-spun yarn gave, as may be expected, a higher strength-irregularity percentage than those spun on the Laboratory frame. But the difference is small in 40s and 50s spun from lint obtained from selected kapas.

*Twist Tests.*—The twist factor or twist multiplier, which is obtained by dividing the number of turns per inch by the root-count of yarn, is given in column 17 of Table II.

It will be seen that the twist factor has varied from 3·2 to 5·6, the average twist factor being about 5 for 10s-14s counts, 4·8 for 20s-30s, and 3·90 for 40s. It should, however, be noted that these twist factors are likely to give the optimum strength for the counts of yarns spun on the Ambar Charkha, whereas all the yarns spun on the ring frame (Laboratory) were spun with a twist factor of 4. It may be remarked that if the twist factors employed in charkha spinning are used for spinning in the ring frame (Laboratory) the values of lea strength and single-thread strengths would be higher still.

*Yarn Evenness and Neppiness.*—The evenness class and the neps per yard of the yarns spun on the Ambar Charkha and those of the Laboratory-spun yarns are given in Table IX. Yarns wound on black boards are also sent along with this report.

A comparison of the evenness of the two yarns shows that the charkha yarn is fairly uneven to uneven in 10s and 14s, fairly even to uneven in 20s and 30s and even to fairly even in 40s and 50s, while the Laboratory-spun yarn is either even or even to fairly even in all counts. Here again, the charkha yarn is more even in finer counts than in the coarser ones.

As regards neppiness, all the yarns spun on the charkha are neppy while the Laboratory yarns are slightly neppy, except those spun from Laxmi, M.C.U. 1 cottons.

In conclusion, it may be remarked that the chief drawbacks of the charkha yarn appear to be the unevenness and neppiness. Generally speaking, this might be mostly attributed *inter alia* to various factors, such as (a) the uneven lap, the manner of handling the *pattas* and the defective weighting of the rollers by springs and strings in the Ambar *Belani*, and (b) the jerky movements of the various parts of the Ambar Charkha, sloppage of the strings used to drive the various pulleys, defective spring weighting of the rollers and the unsteady spindle itself.

*Fibre Properties*: It was suspected that the *Dhunai Modhia* might break the fibres in the carding-process. The mean fibre-length of these cottons was, therefore, determined for samples obtained before and after carding, and the results are given in Table X.

TABLE X.—*Mean fibre-length (inch) of samples before and after carding*

| Laboratory Sample No. | Cotton | Mean fibre-length (inch) | |
|---|---|---|---|
| | | Before carding | After carding in Dhunai Modhia |
| 14890 | Mathew Local | 0·72 | 0·67 |
| 14771 | 35/1 | 0·77 | 0·73 |
| 14786 | Gaorani 6 | 0·81 | 0·82 |
| 14880 | Vijay | 0·92 | 0·90 |
| 14975 | H. 420 | 0·87 | 0·80 |
| 14500 | Jarila | 0·84 | 0·79 |
| 14835 | Laxmi | 0·89 | 0·82 |
| 14991 | Co. 2 | 0·87 | 0·74 |
| 15012 | K. 2 | 0·86 | 0·79 |
| 14976 | Buri 0394 | 0·93 | 0·81 |
| 14836 | M.A. 5 | 0·96 | 0·89 |
| 15011 | M.C.U. 1 | 0·94 | 0·81 |

It will be seen from the values given in the above table that there is considerable breakage of fibres in the carding process which is rather serious in the case of fine and long cottons, like M.C.U. 1, Buri 0394 and M.A. 5. It may, therefore, be remarked that this carding process should be avoided or the *Dhunai Modhia* suitably modified to minimise the damage to the fibres.

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## SUMMARY AND TENTATIVE CONCLUSIONS

The Ambar Charkha unit consists of (i) *Dhunai Modhia,* (ii) Ambar *Belani* (sliver preparer), and (iii) Ambar Charkha. The first two devices are meant to clean the cotton and prepare a suitable roving for feeding the Ambar Charkha. Although these have been devised to be as simple as possible, further improvements seem necessary. For example, *Dhunai Modhia* ruptures the fibres, as the present experiments have shown; it should, therefore, be modified or discarded. The Ambar *Belani* (sliver preparer) is a useful device, but it is here that the foundations for the irregularity or unevenness of yarn are laid. In the present processing, the lap is made by hand, the *pattas* are crimpled, *i.e.,* 128 yards are compressed in the palm of the left hand to a few inches, and then spread out again for doubling and further passages through the *Belani* the spring and string-weighting on the two pairs of rollers, which are likely either to produce slippage or stickiness of the sliver depending on the condition of the spring, etc.; the insertion of the roving twist appears to be somewhat irregular. Preparations of a fairly even roving is almost an art depending to some extent on the personal skill of the operator.

As regards the Ambar Charkha itself, it is a simplified ring frame with 4 spindles. The present model has no smooth movement of its parts; this has to be improved by re-designing the various parts and minimising friction, wherever possible. All sources which are likely to produce unevenness and neppiness in the yarn may have to be investigated.

It may be mentioned here that the economic aspect and the weaving performance of the yarn spun on this Charkha have not been examined in this investigation.

From the experimental results obtained on 12 varieties of Indian cottons, possessing a fairly wide range of fibre-properties, the following tentative conclusions may be drawn:—

(1) The production of yarn per spindle per day of 8 hours on the Ambar Charkha itself is, on an average, 3·5 hanks for 10s, 3·1 hanks for 14s, 4·1 hanks for 20s, 3 hanks for 30s, 4·3 hanks for 40s, and 3·1 hanks for 50s counts respectively, the corresponding production in ounces being 5·62, 3·58, 3·3, 1·61, 1·72 and 1·0 respectively. If, however, the total time for the conversion of lint to reeled yarn is considered, the production figures are nearly a fourth of the above figures. Further, it has to be reckoned here that an average village worker might not work with the same speed as that attained by Shri Gourhari Das. Consequently, the production figures are likely to be less than those given here.

(2) The range of variation of lea strength of a yarn spun on the Ambar Charkha lay within fairly wide limits. If the lea-strengths of the Charkha yarns are compared with the reeling standards of lea strength laid down by the Textile Commissioner for hand-looms, it will be observed that 20s and 40s yarns come up to the standards, while 30s yarns give lower values. The good performance of the Charkha in spinning 40s yarn might perhaps be attributed to the selection of better quality of lint obtained by hand-ginning the selected kapas.

(3) If, however, the charkha yarn is compared with that spun on mill machinery installed at the Laboratory, the former gives, on an average, 65·4, 61·4 and 85·5 per cent. of the latter for 20s, 30s, and 40s respectively.

(4) Single-thread strength and extension tests generally confirm the findings derived from the lea tests; except that the extension of charkha yarn is somewhat lower than that of the Laboratory yarn. Compared to the Laboratory yarn, the single-thread strength-irregularity of the Charkha yarn is high.

(5) It may be mentioned that the average twist factor inserted in the yarn varied from 3·2 to 5·6 for Charkha yarn, while it was 4 for Laboratory yarn. This means that the lea and single-thread strength values of the latter would be higher if the same twist factors as those found in the charkha-spun yarn are inserted.

(6) The chief drawbacks of the charkha yarn appear to be its unevenness and neppiness compared to the Laboratory yarn.

## ACKNOWLEDGMENTS

Thanks are due to Shri V. V. Gupte, Spinning Master, for supervising these tests, to Shri M. G. Rege for recording the experimental observation, to Shri V. Venkataraman for compiling the data. Last but not the least, thanks are due to Shri Gourhari Das, who is an expert of the All India Khadi and Village Industries Board, and throughout worked with much zeal, for spinning the cottons mentioned in this report.

(Sd.) C. NAJUNDAYYA,
Director,
Technological Laboratory.

MATUNGA, BOMBAY;
*Dated the* 14*th March*, 1956.

## ANNEXURE I

**Government of India**

**Ministry of Commerce and Industry, Office of the Textile Commissioner, Wittet Road, Ballard Estate, Bombay-1.**

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No. P & D/UNEC/15/892. Dated the 22nd/23rd August, 1955.

The Director,
Technological Laboratory.
Matunga.

सत्यमेव जयते

SUBJECT—*Experiments with Ambar Charkha.*

Dear Sir,

I am directed to furnish the following points which might be of use to you while deciding a comprehensive scheme for conducting experiments on Ambar Charkha:

(1) mechanical condition, *i.e.*, whether the Charkha is mechanically sound and can stand the strain of continuous operation;

(2) whether the Charkha has suitable arrangements for processing cottons of different staple length and for varying the count, the draft, the twist, etc.;

(3) the production per spindle for 8 hours for different counts and the efficiency obtainable when operated at a speed which can be maintained over a long period;

(4) the range of count of yarn that can be spun from important varieties of cotton;

(5) the evenness of the yarn spun, its cleanliness, neppiness, the regularity of flow of twist and the count lea strength product;

(6) the percentage of waste produced for the different types of cotton;

(7) the number of men required on the various processes and the production that is possible in poundage;

(8) the statistical analysis of the data obtained and comparison of the same with data for mill yarn;

(9) the quality of cloth woven on handloom out of yarn produced on Ambar Charkha and the difficulties, if any, experienced in weaving of this yarn;

(10) comparison of cloth produced from yarn produced by Ambar Charkha with similar cloth produced on handloom from mill yarn.

We shall be thankful if you could enlighten us about the scheme when you are in a position to finalise it.

Yours faithfully,
(Sd.) A. C. CHAUDHURI,
Deputy Director (UNEC).

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## ANNEXURE II

### Experiments on Ambar Charkha Unit

Discussions on the procedure to be adopted in testing the performance of this Charkha took place at the Technological Laboratory on the 5th October, 1955, between 11 A.M. and 2 P.M., when the following were present:—

Dr. C. Nanjundayya—Director, Technological Laboratory.

Shri A. C. Chaudhuri—Representative of the Textile Commissioner.

Shri V. V. Gupte—Spinning Master, Technological Laboratory.

Shri Gourhari Das—Representing the Khadi Board.

The following procedure was decided upon:—

For spinning 10s to 30s counts, the lint available at the Technological Laboratory should be used. The following processing should be employed:—

(1) Beating on jally—gauze.
(2) Bowing—*Madhyam Pinjan.*
(3) Carding—*Dhunai Modhia.*
(4) *Belani* (Sliver Preparer)—Ambar *Belani.*
(5) Ring Frame (Ambar Charkha).

The first two operations should be left to be decided upon by the worker concerned for each cotton. The other three processes would be compulsory for all cottons for the range of counts 10s to 30s. As regards the *Belani,* it was decided that the passage of the "lap" should be within the range of 4 to 8 times and the preparation of the roving should be 3 to 5 passages through the *Belni.* It was also decided that for the cottons, a list of which is given below, experiments upto 30s should be undertaken immediately:—

| Laboratory Sample No. | Cotton | Counts |
|---|---|---|
| 14890 | Matheo | 10s and 14s |
| 14771 | 35/1 | Do. |
| 14880 | Vijay | 20s and 30s |
| 14786 | Gaorani 6 | Do. |
| 14975 | H. 420 | Do. |
| 14500 | Jarila | Do. |
| 14835 | Laxmi | Do. |
| 14991 | Co. 2 | Do. |
| 15012 | K. 2 | Do. |
| 14976 | Buri 0394 | 30s |
| 14836 | M. A. 5 | Do. |
| 15011 | Madras Cambodia Uganda 1 | Do. |

If it is intended to spin counts higher than 30s, it was agreed that seed-cotton should be used for the purpose and the following procedure should be adopted:—

(1) Bowing.
(2) *Belni* (Ambar *Belni*).
(3) Ring Frame (Ambar Charkha).

It was agreed that experiments on counts higher than 30s should be undertaken after completing the tests on these cottons upto 30s counts. The cottons to be experimented upon and the counts to be spun are as follows:—

| *Cotton.* | *Counts.* |
|---|---|
| Vijay | 40s |
| Laxmi | 40s |
| Buri 0394 | 40s and 50s |
| M. A. 5 | 40s and 50s |
| Madras Cambodia Uganda 1 | 40s and 50s |

Shri Gourhari Das should train one of the experienced operatives to work this unit independently in the minimum possible time.

It was also decided that these experiments should be conducted in a room where there is no control of relative-humidity and temperature and the yarn spun from these cottons should be wet-reeled before it is tested under standard atmospheric conditions.

The demonstrator (Shri Gourhari Das) was expressly given to understand that he should get the complete details of processing, as regards speeds, settings, etc., recorded as accurately as possible.

As no definite programme of work has been given by the Khadi Board upto now, it was decided that both the processes and the cottons to be tested should have the prior approval of the Khadi Board and the Textile Commissioner before undertaking the proposed experiments. If the Khadi Board or the Textile Commissioner has any modification to suggest, it should be communicated immediately to avoid further delay in carrying out these experiments.

(Sd.) C. Nanjundayya.
(Sd.) A. C. Chaudhuri
(Sd.) V. V. Gupte.
(Sd.) G. H. Dass.

Technological Laboratory,
Mantunga,
Dated the 5th October, 1955.

सत्यमेव जयते

# TABLE IA

*Table showing experimental Results obtained on Ambar Charkha*

STARTING MATERIAL BEING LINT

| Serial No. | Lab. Sample No. | Cotton | Commencing date | Finishing date | Total time taken | Actual working hours upto spindle point excluding time for repairs etc. | Wt. of lint (cleaned in Jally) | Nominal counts | Total yarn produced length | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1955 | 1955 | hrs. min. | hrs. min. | Tolas ozs. as. | | Gundi tars | Hanks yd. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 1 | 14890 | Mathio Local | 8—11 | 16—11 | 19—60 | 12—0 | 24 9·6 | 10s | 5 100 | 5 200 |
| | | | 16—11 | 22—11 | 16—0 | 10—53 | 15 6·0 | 14s | 4 347 | 4 516 |
| 2 | 14771 | 35/1 | 23—11 | 26—11 | 16—0 | 11—2 | 20 8·0 | 10s | 4 600 | 5 13 |
| | | | 28—11 | 30—11 | 10—40 | 7—40 | 16 6·4 | 14s | 4 504 | 4 725 |
| 3 | 14880 | Vijay | 7—10 | 8—10 | 14—0 | 10—40 | 12 4·8 | 20s | 5 63 | 5 151 |
| | | | 10—10 | 11—10 | 17—30 | 9—50 | 8 3·2 | 30s | 5 453 | 5 671 |
| 4 | 14786 | Gaorani 6 | 22—10 | 25—10 | 11—30 | 9—4 | 12 4·8 | 20s | 6 25 | 6 113 |
| | | | 22—10 | 25—10 | 10—55 | 7—53 | 8 3·2 | 30s | 5 20 | 5 93 |
| 5 | 14975 | H. 420 | 13—10 | 14—10 | 9—40 | 7—10 | 12 4·8 | 20s | 5 40 | 5 120 |
| | | | 13—10 | 15—10 | 14—30 | 8—20 | 8 3·2 | 30s | 5 55 | 5 140 |
| 6 | 14500 | Jarila | 17—10 | 19—10 | 9—35 | 7—10 | 12 4·8 | 20s | 4 383 | 4 564 |
| | | | 17—10 | 19—10 | 17—45 | 12—10 | 8 3·2 | 30s | 5 610 | 6 40 |
| 7 | 14835 | Laxmi | 20—10 | 21—10 | 11—50 | 8—50 | 12 4·8 | 20s | 6 0 | 6 80 |
| | | | 20—10 | 22—10 | 13—0 | 9—31 | 8 3·2 | 30s | 4 560 | 4 800 |
| 8 | 14991 | Co. 2 | 25—10 | 3—11 | 11—25 | 8—42 | 12 4·8 | 20s | 5 470 | 5 693 |
| | | | 25—10 | 28—10 | 12—25 | 8—40 | 8 3·2 | 30s | 5 260 | 5 413 |
| 9 | 15012 | K. 2 | 3—11 | 4—11 | 11—0 | 7—56 | 12 4·8 | 20s | 5 320 | 5 493 |
| | | | 2—11 | 4—11 | 16—20 | 95—5 | 8 3·2 | 30s | 5 183 | 5 311 |
| 10 | 14976 | Buri 0394 | 1—12 | 5—12 | 13—45 | 9—16 | 8 3·2 | 30s | 4 240 | 4 373 |
| | | | | | | | * 2·7 | | | |
| 11 | 14836 | M.A. 5 | 7—12 | 9—12 | 11—15 | 7—15 | 6—12* | 30s | 4 130 | 4 227 |
| | | | | | | | * 2·6 | | | |
| 12 | 15011 | M.C.U. 1 | 9—12 | 15—12 | 8—5 | 6—30 | 6—8* | 30s | 3 500 | 3 707 |

| wt. of yarn produced | | Waste % | Breakages on charkha | Time for spinning on Charkha | Production of yarn per hr. on charka (4 spindles) | | | P. M. H. upto Spinning (4 spindles). | | | Reeling Breakages | Time for Reeling | P. M. H. including Reeling (4 spindles) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tolas as. | ozs. | | | hrs. min. | Gundis | Hank | Oz. | Gundis | Hanks | Oz. | | hr. min. | Gundi | Hank | Oz. |
| 11 | | 12 | 13 | 14 | 15 | | | 16 | | | 17 | 18 | 19 | | |
| 21—10 . | 8 65 | 9·9 | 45 | 3—13 | 1·6 | 1·6 | 2·60 | 0·43 | 0 44 | 0·70 | .. | 1—17 | 0·39 | 0 39 | 0·62 |
| 13—14½ . | 5·56 | 7·3 | 102 | 4—33 | 1·0 | 1·0 | 1·16 | 0·42 | 0·42 | 0·48 | 50 | 1—32 | 0·37 | 0·37 | 0·42 |
| 18—0 . | 7·20 | 10·0 | 31 | 2—39 | 1·9 | 1·9 | 3·02 | 0·45 | 0·45 | 0·72 | 8 | 0—47 | 0·42 | 0·42 | 0·67 |
| 13—12 . | 5·50 | 14·1 | 51 | 2—18 | 2·1 | 2·1 | 2·42 | 0·62 | 0·63 | 0·72 | 10 | 0—54 | 0·56 | 0·57 | 0·65 |
| 10—9½ . | 4·24 | 11·7 | 10 | 2—15 | 2·3 | 2·3 | 1·84 | 0·48 | 0·49 | 0·39 | .. | 0—50 | 0·44 | 0·45 | 0·36 |
| 7—2 . | 2·85 | 10·9 | 60 | 4—15 | 1·3 | 1·4 | 0·74 | 0·58 | 0·59 | 0·32 | 28 | 1—10 | 0·52 | 0·53 | 0·28 |
| 11—4 . | 4·50 | 6·2 | 17 | 2—41 | 2·3 | 2·3 | 1·84 | 0·67 | 0·68 | 0·54 | 2 | 1—10 | 0·59 | 0·60 | 0·48 |
| 6—13½ . | 2·74 | 14·5 | 46 | 3—20 | 1·5 | 1·5 | 0·82 | 0·64 | 0·65 | 0·35 | 15 | 1—10 | 0·56 | 0·56 | 0·30 |
| 9—13 . | 3·92 | 18·2 | 54 | 4—5 | 1·2 | 1·3 | 1·00 | 0·71 | 0·72 | 0·58 | .. | 1—42 | 0·57 | 0·58 | 0·46 |
| 6—5 . | 2·52 | 21·1 | 137 | 4—10 | 1·2 | 1·2 | 0·66 | 0·61 | 0·62 | 0·33 | .. | 2—18 | 0 48 | 0·49 | 0·26 |
| 10—3½ . | 4·09 | 14·8 | 46 | 2—13 | 2·1 | 2·1 | 1·68 | 0·64 | 0·65 | 0·52 | 6 | 0—56 | 0·57 | 0·58 | 0·46 |
| 6—12 . | 2·70 | 15·6 | 135 | 5—52 | 1·0 | 1·0 | 0·56 | 0·49 | 0·50 | 0·27 | 77 | 2—27 | 0·41 | 0·41 | 0·22 |
| 10—5½ . | 4·14 | 13·8 | 18 | 3—38 | 2·3 | 2·3 | 1·85 | 0·68 | 0·69 | 0·55 | 20 | 1—23 | 0·59 | 0·60 | 0·48 |
| 6—11 . | 2·68 | 16·4 | 50 | 3—2 | 1·6 | 1·6 | 0·88 | 0·51 | 0·52 | 0·28 | 14 | 1—3 | 0·46 | 0·47 | 0·25 |
| 10—13 . | 4·32 | 9·9 | 17 | 2—37 | 2·2 | 2·2 | 1·76 | 0·66 | 0·67 | 0·54 | 5 | 1—4 | 0·59 | 0·60 | 0·48 |
| 7—2 . | 2·85 | 10·9 | 57 | 3—9 | 1·7 | 1·7 | 0·92 | 0·62 | 0·63 | 0·34 | .. | 1—12 | 0·55 | 0·56 | 0·30 |
| 10—10 . | 4·25 | 11·5 | 7 | 2—48 | 2·0 | 2·0 | 1·60 | 0·69 | 0·70 | 0·56 | 5 | 1—2 | 0·67 | 0·68 | 0·50 |
| 6—13 . | 2·72 | 13·8 | 83 | 3—42 | 1·4 | 1·5 | 0·77 | 0·53 | 0·54 | 0·29 | 18 | 1—11 | 0·47 | 0·48 | 0·26 |
| 5—14 . | 2·35 | 26·6 | 97 | 2—58 | 1·5 | 1.5 | 0·79 | 0·47 | 0·48 | 0·26 | 35 | 1—7 | 0·42 | 0·43 | 0·23 |
| 6—3 . | 2·48 | 8·3 | 70 | 2—30 | 1·7 | 1·7 | 0·91 | 0·58 | 0·59 | 0·31 | 40 | 1—0 | 0·52 | 0·52 | 0·22 |
| 5—1 . | 2·02 | 22·1 | 58 | 2—0 | 1·9 | 1·9 | 1·02 | 0·58 | 0·59 | 0·31 | 33 | 0—45 | 0·52 | 0·53 | 0·28 |

1 Tar = 4 ft.
640 Tars = 1 Gundi.
= 853 1/3 yds.
Wts. used for weighing the yarn are Bengal Wts.
One hank = 840 yds.
P.M.H. = Production per man-hour.

## TABLE IB

*Table showing experimental results obtained on Ambar Churkha.*

STARTING MATERIAL BEING 'KAPAS'

| 1 | 2 | 3 | 4 | 5 | 6 | | 7 | | 8 | | 9 | | | 10 | 11 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Serial No. | Lab. Sample No. | Cotton | Commencing date | Finishing date | Time taken for ginning | | Total time taken | | Actual working hours upto spindle point including ginning but excluding time for repairs etc. | | Wt. of lint from kapas | | | Nominal counts | Total yarn produced (length) | | | |
| | | | | | hrs. | min. | hrs. | min. | hrs. | min. | Tolas | as. | ozs. | | Hanks | yds. | Guindi | tars |
| 1 | 14880 | Vijay | 15-12-55 | 19-12-55 | 1 | 0 | 11 | 45 | 7 | 1 | 5 | 0 | 2·0 | 40s | 5 | 50 | 5 | 133 |
| 2 | 14835 | Laxmi | 26-12-55 | 28-12-55 | 3 | 35 | 11 | 35 | 8 | 42 | 5 | 0 | 2·0 | 40s | 4 | 510 | 4 | 733 |
| 3 | 14976 | Buri 03·94 | 19-12-55 | 22-12-55 | 2 | 56 | 14 | 15 | 8 | 50 | 5 | 0 | 2·1 | 40s | 4 | 420 | 4 | 613 |
| | | | 23-12-55 | 24-12-55 | 2 | 14 | 11 | 39 | 8 | 46 | 4 | 0 | 1·6 | 50s | 4 | 480 | 4 | 693 |
| 4 | 14836 | M. A. 5 | 6-1-56 | 10-1-56 | 2 | 34 | 14 | 45 | 9 | 9 | 4 | 8 | 1·8 | 40s | 4 | 25 | 4 | 87 |
| | | | 14-1-56 | 17-1-56 | 2 | 0 | 11 | 0 | 8 | 52 | 3 | 8 | 1·4 | 50s | 4 | 0 | 4 | 53 |
| 5 | 15011 | M.C.U. 1 | 28-12-55 | 31-12-55 | 2 | 54 | 9 | 54 | 8 | 12 | 4 | 8 | 1·8 | 40s | 4 | 140 | 4 | 240 |
| | | | 2-1-56 | 3-1-56 | 2 | 16 | 11 | 58 | 8 | 39 | 3 | 8 | 1·4 | 50s | 4 | 320 | 4 | 480 |

(1) Waste percent is calculated on the lint and (2) Quite an amount of kapas was rejected during ginning

1 Tar = 4 feet
640 Tars = 1 Gundi
853 1/3 yds.
Wts. used for weighing the yarn are Bengal wts.
1 Hank = 840 yds.
P.M.H. = Production per man-hour.

| 12 | | 13 | 14 | 15 | | 16 | | | 17 | | | 18 | 19 | | 20 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wt. of yarn produced | | Waste % | Breakages during spinning | Time for spinning on Charkha | | Production of yarn per hour on Charkha (4 spindles) | | | P.M.H. upto spindle point (4 spindles) | | | Breakages during reeling | Time for Reeling | | P. M. H. including Reeling (4 spindles) | | |
| Tolas as. | ozs. | | | hr. | min. | Gundis | Hanks. | Oz. | Gundi. | Hank. | Oz. | | hr. | min. | Gundi. | Hank. | Oz. |
| 4—13 . | 1·92 | 3·8 | 42 | 2 | 36 | 2·0 | 2·0 | 0·79 | 0·72 | 0·73 | 0·29 | 26 | 0 | 59 | 0·63 | 0·64 | 0·26 |
| 4—10 . | 1·85 | 7·5 | 35 | 2 | 15 | 2·1 | 2·2 | 0·86 | 0·55 | 0·56 | 0·22 | 20 | 0 | 47 | 0·50 | 0·51 | 0·20 |
| 4—10 . | 1·85 | 7·5 | 30 | 2 | 15 | 2·1 | 2·1 | 0·84 | 0·53 | 0·54 | 0·22 | 28 | 0 | 57 | 0·48 | 0·48 | 0·19 |
| 3—10½ . | 1·46 | 8·0 | 92 | 3 | 15 | 1·5 | 1·5 | 0·47 | 0·54 | 0·55 | 0·18 | 48 | 1 | 2 | 0·48 | 0·49 | 0·16 |
| 4—½ . | 1·61 | 10·4 | 35 | 1 | 54 | 2·1 | 2·2 | 0·86 | 0·44 | 0·45 | 0·18 | 48 | 0 | 58 | 0·40 | 0·41 | 0·16 |
| 3—4 . | 1·30 | 7·1 | 14 | 2 | 36 | 1·5 | 1·6 | 0·50 | 0·45 | 0·46 | 0·15 | 6 | 1 | 8 | 0·40 | 0·41 | 0·13 |
| 4—1½ . | 1·64 | 9·0 | 29 | 2 | 0 | 2·1 | 2·1 | 0·86 | 0·51 | 0·52 | 0·21 | 28 | 0 | 38 | 0·48 | 0·49 | 0·20 |
| 3—4 . | 1·30 | 7·1 | 48 | 2 | 48 | 1·6 | 1·6 | 0·52 | 0·52 | 0·53 | 0·17 | 28 | 0 | 53 | 0·47 | 0·48 | 0·15 |

## TABLE II

## *Yarn Test Results*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| | | | | LEA | | | | |
| Serial No. | Sample No. | Cotton | Nominal counts | Actual counts | Variation of actual count from nominal (%) | Strength (lbs.) | Lea Strength (lbs.) | |
| | | | | | | | Highest value | Lowest value |
| | | STARTING MATERIAL—LINT | | | | | | |
| 1 | 14880 | Vijay | 20s | 18·9 | —5·5 | 85·9 | 112·5 | 61·5 |
| 2 | 14880 | Vijav | 30s | 32·6 | +8·7 | 37·5 | 48·0 | 26·0 |
| 3 | 14975 | H. 420 | 20s | 21·1 | +5·5 | 37·2 | 43·5 | 29·0 |
| 4 | 14975 | H. 420 | 30s | 32·9 | +9·7 | 24·7 | 36·0 | 16·0 |
| 5 | 14500 | Jarila Jalgaon | 20s | 18·9 | —5·5 | 65·9 | 75·0 | 45·0 |
| 6 | 14500 | ,, ,, | 30s | 41·7 | +39·0 | 19·5 | 23·5 | 15·0 |
| 7 | 14835 | Laxmi Gadag | 20s | 23·4 | +17·0 | 59·4 | 73·0 | 49·0 |
| 8 | 14835 | ,, ,, | 30s | 30·2 | +0·7 | 41·6 | 53·0 | 30·0 |
| 9 | 14786 | Gaorani 6 | 20s | 21·4 | +7·0 | 67·8 | 85·0 | 54·0 |
| 10 | 14786 | ,, 6 | 30s | 30·8 | +2·7 | 34·0 | 41·0 | 28·0 |
| 11 | 14991 | Co 2 | 20s | 21·3 | +6·5 | 52·8 | 64·0 | 38·0 |
| 12 | 14991 | Co 2 | 30s | 31·1 | +3·7 | 29·8 | 33·0 | 27·0 |
| 13 | 15012 | K. 2 | 20s | 20·6 | +3·0 | 60·4 | 77·0 | 28·0 |
| 14 | 15012 | K. 2 | 30s | 31·6 | +5·3 | 32·2 | 46·0 | 22·0 |
| 15 | 14890 | Mathio Local | 10s | 10·2 | +2·0 | 66·7 | 78·0 | 52·0 |
| 16 | 14890 | ,, ,, | 14s | 14·9 | +6·4 | 30·3 | 39·0 | 24·0 |
| 17 | 14811 | 35/1 | 10s | 11·3 | +13·0 | 80·8 | 92·0 | 70·0 |
| 18 | 14881 | 35/1 | 14s | 14·2 | +1·4 | 55·6 | 73·0 | 38·0 |
| 19 | 14976 | Burj 0394 | 30s | 30·3 | +1·0 | 27·9 | 31·0 | 23·0 |
| 20 | 14836 | M.A.V. | 30s | 27·3 | —9·0 | 24·4 | 39·0 | 17·0 |
| 21 | 15011 | M.C.U. 1 | 30s | 30·0 | 0·0 | 37·6 | 51·0 | 27·0 |
| | | STARTING MATERIAL—KAPAS | | | | | | |
| 22 | 14880 | Vijay | 40s | 41·6 | +4·0 | 32·2 | 42·5 | 25·0 |
| 23 | 14976 | Buri 0394 | 40s | 40·2 | +0·5 | 31·2 | 36·0 | 25·0 |
| 24 | 14976 | " " | 50s | 52·1 | +4·2 | 25·5 | 34·5 | 18·8 |
| 25 | 14835 | Laxmi Gadag | 40s | 41·7 | +4·2 | 38·2 | 48·4 | 28·0 |
| 26 | 15011 | M.C.U. I | 40s | 41·1 | +2·8 | 33·2 | 42·0 | 22·0 |
| 27 | 15011 | " | 50s | 55·1 | +10·2 | 25·0 | 30·5 | 16·0 |
| 28 | 14836 | M.A.V. | 40s | 39·7 | —0·8 | 31·5 | 39·5 | 22·5 |
| 29 | 14836 | M.A.V. | 50s | 49·6 | —0·8 | 22·7 | 28·5 | 18·8 |

*Irregularity percentage is calculated from the formula $(\frac{M=MI}{M}+100)$ where M is the mean and MI is the mean of those readings which are less than M.

**Please see bottom of Table IX for explanation of these figures.

TABLE II.—*contd.*

*Yarn Test Results*

| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|
| SIN GLE-THREAD | | | | | | TWIST | | | |
| Count-Strength product | Actual counts | Strength (ozs.) | Count-strength product | Strength Irregularity (%) | Extension (%) | Turns per inch | Twist multiplier | Evenness Class ** | Neps per yard |
| 1624 | 17·2 | 14·2 | 244 | 17·8 | 5·9 | 20·5 | 4·6 | 4 1/2 | 3·5 |
| 1222 | 37·0 | 6·1 | 226 | 17·3 | 4·1 | 30·7 | 5·6 | 5 | 3·8 |
| 785 | 19·0 | 8·8 | 167 | 20·6 | 5·9 | 23·6 | 5·3 | 6 | 3·2 |
| 813 | 33·9 | 4·7 | 159 | 19·4 | 4·7 | 29·5 | 5·4 | 6 1/2 | 4·2 |
| 1246 | 18·9 | 11·8 | 223 | 10·4 | 5·8 | 19·7 | 4·4 | 5 1/2 | 4·2 |
| 813 | 40·4 | 3·8 | 154 | 23·9 | 4·7 | 29·2 | 5·3 | 6 | 3·8 |
| 1390 | 23·5 | 10·3 | 242 | 12·2 | 6·7 | 21·0 | 4·7 | 5 1/2 | 6·2 |
| 1256 | 31·0 | 7·3 | 226 | 16·4 | 5·0 | 25·4 | 4·6 | 5 1/2 | 4·2 |
| 1451 | 19·8 | 12·9 | 255 | 13·9 | 7·2 | 21·9 | 4·9 | 5 1/2 | 2·8 |
| 1047 | 31·5 | 6·9 | 217 | 19·3 | 4·7 | 24·6 | 4·5 | 5 | 2·2 |
| 1125 | 21·7 | 9·4 | 204 | 14·9 | 6·9 | 23·1 | 5·2 | 5 1/2 | 3·5 |
| 927 | 29·6 | 5·8 | 172 | 18·9 | 4·6 | 27·3 | 5·0 | 6 | 4·0 |
| 1244 | 20·8 | 10·7 | 223 | 14·7 | 6·4 | 22·0 | 4·9 | 5 | 2·2 |
| 1018 | 32·9 | 6·0 | 197 | 20·5 | 4·3 | 24·9 | 4·5 | 5 1/2 | 2·8 |
| 680 | 9·2 | 15·7 | 144 | 16·7 | 10·0 | 15·0 | 4·7 | 6 | 3.0 |
| 451 | 14·7 | 8·2 | 121 | 22·8 | 7·5 | 19·1 | 5·1 | 6 1/2 | 3·2 |
| 913 | 11·1 | 15·2 | 169 | 13·8 | 8·8 | 16·7 | 5·3 | 6 1/2 | 3·0 |
| 790 | 14·0 | 11·5 | 161 | 18·3 | 7·4 | 17·6 | 4·7 | 6 1/2 | 2·2 |
| 845 | 30·0 | 5·5 | 165 | 16·8 | 7·0 | 23·1 | 4·2 | 6 | 2.5 |
| 666 | 26·0 | 7·0 | 182 | 17·3 | 7·8 | 25·4 | 4·6 | 6 | 5·5 |
| 1128 | 32·5 | 6·4 | 208 | 18·06 | 5·2 | 23·5 | 4·3 | 6 | 4·8 |
| | | | | | | | | | |
| 1340 | 43·0 | 5·8 | .249 | 15·9 | 4·1 | 24·1 | 3·8 | 4 1/2 | 2·2 |
| 1254 | 40·4 | 6·2 | 250 | 17·1 | 5·2 | 25·4 | 4·0 | 4 | 2·0 |
| 1329 | 50·3 | 4·3 | 216 | 15·0 | 4·6 | 22·9 | 3·2 | 4 1/2 | 2·0 |
| 1593 | 42·3 | 6·7 | 283 | 10·2 | 4·7 | 23·1 | 3·7 | 4 | 2·0 |
| 1365 | 40·2 | 6·0 | 241 | 15·2 | 4·8 | 24·0 | 3·8 | 4 1/2 | 2·5 |
| 1378 | 58·6 | 4·8 | 281 | 16·0 | 4·1 | 27·7 | 3·9 | 5 | 2·5 |
| 1251 | 38·1 | 6·7 | 255 | 11·8 | 5·4 | 26·5 | 4·2 | 4 | 3·2 |
| 1126 | 47·2 | 4·2 | 198 | 21·9 | 6·2 | 29·0 | 4·1 | .. | .. |

## TABLE IX

## COMPARATIVE VALUES FOR CHARKHA SPUN AND LABORATORY SPUN YARNS FOR EVENNESS CLASS AND NEPS PER YARD ARE GIVEN IN THE TWO TABLES BELOW

### EVENNESS CLASS

| Cotton | 10s | | 14s | | 20s | | 30s | | 40s | | 50s | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Charkha yarn | Labora-tory spun yarn | Charkha yarn | Labora-tory spun yarn | Charkha yarn | Labora-tory spun yarn | Charkha yarn | Labora-tory spun yarn | Charkha yarn | Labora-tory spun yarn | Charkha yarn | Labora-tory spun yarn |
| Mathio Local | 6 | 3 | 6½ | 4 | .. | .. | .. | .. | .. | .. | .. | .. |
| 35/1 | 6½ | 4 | 6½ | 3 | .. | .. | .. | .. | .. | .. | .. | .. |
| Gaorani 6 | .. | .. | .. | .. | 5½ | 3 | 5 | 4 | .. | .. | .. | .. |
| Vijay | .. | .. | .. | .. | 4½ | 3 | 5 | 3½ | 4½ | 4 | .. | .. |
| H. 420 | .. | .. | .. | .. | 6 | 3 | 6½ | 4 | .. | .. | .. | .. |
| Jarila | .. | .. | .. | .. | 3½ | 3 | 6 | 4 | .. | .. | .. | .. |
| Laxmi | .. | .. | .. | .. | 3½ | 3 | 5½ | 4 | 4 | 5 | .. | .. |
| Co. 2 | .. | .. | .. | .. | 5½ | 3 | 6 | 4 | .. | .. | .. | . |
| K. 2 | .. | .. | .. | .. | 5 | 3 | 3½ | 4 | .. | .. | .. | .. |
| Buri 0394 | .. | .. | .. | .. | .. | .. | 6 | 4 | 4 | 5 | 4½ | .. |
| M.A. 5 | .. | .. | .. | .. | .. | .. | 6 | 5 | 4 | 6 | .. | .. |
| M.C.U. 1 | .. | .. | .. | .. | .. | .. | 6 | 4 | 4½ | 5 | 5 | 5½ |

Classification: 3-Even 4-Even, to fairly even 5-fairly even, 6-fairly even to uneven, 7-uneven.

### Table IX—*contd.*

### Neps per yard

| Cotton | 10s | | 14s | | 20s | | 30s | | 40s | | 50s | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Charkha yarn | Laboratory spun yarn | Charkha yarn | Laboratory spun yarn | Charkha yarn | Laboratory spun yarn | Charkha yarn | Laboratory spun yarn | Charkha yarn | Laboratory spun yarn | Charkha yarn | Laboratory spun yarn |
| Mathio Local | 3·0 | 0·3 | 3·2 | 0·8 | .. | .. | .. | .. | .. | .. | .. | .. |
| 35/1 | 3·0 | 0·3 | 2·2 | 0·5 | .. | .. | .. | .. | .. | .. | .. | .. |
| Gaorani 6 | .. | .. | .. | .. | 2·8 | 0·8 | 2·2 | 0·4 | .. | .. | .. | .. |
| Vijay | .. | .. | .. | .. | 3·5 | 0·9 | 3·8 | 0·9 | 2·2 | 0·9 | .. | .. |
| H. 420 | .. | .. | .. | .. | 3·2 | 0·9 | 4·2 | 1·0 | .. | .. | .. | .. |
| Jarila | .. | .. | .. | .. | 4·2 | 1·6 | 3·8 | 1·5 | .. | .. | .. | .. |
| Laxmi | .. | .. | .. | .. | 6·2 | 2·5 | 4·2 | 2·2 | 2·0 | 2·3 | .. | .. |
| Co 2 | .. | .. | .. | .. | 3·5 | 1·0 | 4·0 | 0·8 | .. | .. | .. | .. |
| K. 2 | .. | .. | .. | .. | 2·2 | 1·1 | 2·8 | 1·0 | .. | .. | .. | .. |
| Buri 0394 | .. | .. | .. | .. | .. | .. | 2·3 | 1·2 | 2·0 | 1·1 | 2·0 | .. |
| M.A. 5 | .. | .. | .. | .. | .. | .. | 5·5 | 1·5 | 3·2 | 1·0 | .. | .. |
| M.C.U. 1 | .. | .. | .. | .. | .. | .. | 4·8 | 3·0 | 2·5 | 2·6 | 2·5 | 2·4 |

Classification :— upto 0·5 nep per yd—Practically free of neps.
between 0·5 and 1 nep—Slightly neppy.
between 1 and 2 nep—rather neppy.
between 2 and 5 nep—neppy.
between 5 and 10 nep—very neppy.

## VI

### REPORT OF THE PRINCIPAL, GOVERNMENT CENTRAL TEXTILE INSTITUTE, KANPUR, REGARDING THE TEST ON AMBAR CHARKHA DESIGNED IN ACCORDANCE WITH THE DIRECTIONS RECEIVED FROM THE MINISTRY OF PRODUCTION.

The instructions required that the test should be conducted with the help of the spinners and the ambar charkha sets supplied by the All India Khadi and Village Industries Board and Ambar Charkha Samiti, Ahmedabad, whereas cotton and yarn were to be supplied by the Textile Commissioner, Bombay. Since only one spinner with one charkha had arrived from Wardha and action by Ambar Charkha Samiti, Ahmedabad and the Textile Commissioner was awaited, the tests could not be started till instructions were received verbally on the 11th of May at Delhi that the tests may be conducted with the help of the spinner who may have arrived and with such cotton as may be locally available.

The tests were conducted with the help of one spinner Shri D. P. Singh of Wardha who had been deputed by the All India Khadi and Village Industries Board. As Shri Singh was ill on the 17th of May, observations could be recorded only on four dates, *i.e.*, 14th, 15th, 16th, and 18th. The observations recorded are:—

| | |
|---|---|
| (1) Cotton used— | (i) Vijai of Ahmedabad.<br>(ii) Vijai baled.<br>(iii) Jerilla-baled. |
| (2) Percentage of carding waste . . . . | 2·3 to 3·125% |
| (3) No. of drawing operation . . . . | 1/4/4 |
| (4) No. of Roving operation . . . . | 1/3 |
| (5) Counts spun . . . . . . | 18 to 18·8 |
| (6) Lea strength of the yarn . . . . | 60 lbs. |
| (7) Percentage of waste from Belini to spinning . | From 3 to 8·5% |
| (8) Production in hanks in 4 hours . . . | 6·25 to 8·2 hanks. |
| (9) Carding done— | On *Dhunai Mudia*. |

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Railway receipt of the parcel of cotton and yarn from the Textile Commissioner has been received and they would be available in a day or so. Comparative tests on reeled mill yarn will not be performed and communicated.

(Sd.) J. N. SINGH,
Principal, Govt. Central Textile Institute,
Kanpur.

*May* 19, 1956.

*Tests report of the cloth made of Ambar yarn and mill yarn.*

| Sample made from | Ends per inch. | Picks per inch. | Counts of warp | Counts of weft | Breaking Strength | |
|---|---|---|---|---|---|---|
| | | | | | 7″×4″ Warp | in Lbs. Weft |
| Mill yarn . . | 56 | 57 | 40's | 40's | 54 | 68 |
| Ambar yarn . | 57 | 59 | 40's | 39's | 70 | 89 |

N.B. 1. Ends and picks per inch values represent the mean of 25 readings.

2. The values of warp and weft counts represent the mean of 20 readings.

3. The values of breaking strength tests represent the mean of five readings.

(Sd.) J. N. SINGH,
Principal, Government Central Textile Institute,
Kanpur.

*May* 19, 1956.

COMMENTS ON OBSERVATIONS TAKEN FROM PERFORMANCES ON AMBAR SET WITH 12S YARN FROM WAGAD COTTON SUPPLIED BY TEXTILE COMMISSIONER.

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1. The 12s yarn was spun from wagad cotton *on improved* charkha only as old charkha could not be run due to sickness of one of the spinners.

2. The Wagad cotton is inferior in quality as it contains vegetable impurities to marked extent together with cotton seeds which caused slightly higher percentage of waste in opening and carding except one day *i.e.*, 1st June, 1956 on which the total waste from cotton to spinning is only 6·32%.

3. The Drawing and roving operations were increased and maximum time was taken in *Belni* operations because of the quality of cotton to be processed.

4. The Ambar Charkha was adjusted for spinning 12s. counts with drafting rollers of smaller diam. and twist adjusted by multi-grooved pulley and spindles.

From the chart it is clear that time taken up for *Belni* operations is always on the greater side than that of spinning for 12s count while for 32s it was almost equal in both operations.

From the chart of yarn tests, it has been found that though the turns per inch in Ambar yarn are slightly all over higher but the lea test is on a little lower side. The variations in turns per inch are also considerably less.

(Sd.) J. N. SINGH,
Principal, Government Central Textile Institute,
Kanpur.

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*Abstract of Processing on Ambar Charkha*

Desired count 12s

| Name | Date | Counts | Production in 8 hours (From cotton to spinning including reeling. Hanks.) | Total waste % | Remarks |
|---|---|---|---|---|---|
| Shri D. P. Singh | .. | .. | .. | .. | He did not carry out performance due to illness. |
| Shri B. R. Singh | 1-6-56 | 11·5s | 7·0 | 6·32% | |
| | 2-6-56 | 12·75s | 7·0 | 14·32% | |
| | 3-6-56 | 12·2s | 7·8 | 12·93% | |

(Sd.) J. N. SINGH,
Principal,
Govt. Central Textile Institute, Kanpur.

## YARN TESTS

Desired counts—12s from Wagad cotton.

| | Standard Charkha | | | | Improved Charkha | | | | Mill Reeled Yarn | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date<br>1 | Average Counts<br>2 | Average Lea B S<br>3 | Average T/I<br>4 | Variation in T/I<br>5 | Average Counts<br>6 | Average Lea BS<br>7 | Average T/I<br>8 | Variation in T.I.<br>9 | Average Counts<br>10 | Average Lea BS<br>11 | Average T.I.<br>12 | Variation in T/I.<br>13 |
| 30-5-56 | 12·2s | 17·4 | 12·9 | Min. 12·1<br>Max. 13·7 | .. | .. | .. | .. | 11·6s | 51·2 | 15·1 | Min. 14·6<br>Max. 15·7 |
| 31-5-56 | 10·9 | 21·4 | 14·9 | Min. 14·8<br>Max. 15·0 | 13·88s | 39·6 | 18.8 | Min. 15·7<br>Max. 21·9 | ,,<br>,, | ,,<br>,, | ,,<br>,, | ,,<br>,, |
| 1-6-56 | .. | .. | .. | .. | 11·5s | 45·8 | 18·3 | Min. 17·0<br>Max. 19·7 | ,,<br>,, | ,,<br>,, | ,,<br>,, | ,,<br>,, |
| 2-6-56 | .. | .. | .. | .. | 12·75 | 45·8 | 18·5 | Min. 16·8<br>Max. 20·2 | ,, | ,, | ,, | ,, |
| 3-6-56 | .. | .. | .. | .. | 12·2 | 50·0 | 18·0 | Min. 17·9<br>Max. 18·1 | | | | |

(Sd.) J. N. SINGH,
Principal,
Government Central Textile Institute,
Kanpur.

KANPUR
14-6-1956.

## ABSTRACT OF PROCESSING ON AMBAR CHARKHA

Desired count 32s from Vijay Seed cotton

| Name | Date | Counts | Production in 8 hours from cotton to spg. including Weaving | Toal Waste % | Remarks |
|---|---|---|---|---|---|
| Sri B. R. Singh | 25-5-56 | 32·0s | 6-hanks | 3·9 | Improved Charkha. |
| | 26-5-56 | 33·3s | 7 1/2 hanks | 7·1 | |
| | 28-5-56 | 33·3s | 8 2/3 hanks | 5·3 | |
| Sri D. P. Singh | 25-5-56 | 26·2s | 6-hanks | .. | |
| | 26-5-56 | 20·9s | 4 1/2 hanks | .. | Standard Charkha |
| | 28-5-56 | 27·0s | 6-hanks | | |

Sd/- J. N. SINGH,
Principal,
Government Central Textile Institute,
Kanpur

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# APPENDIX VII

**Report of the All India Khadi and Village Industries Board on the field tests carried out on the Ambar Charkha under the "Ambar Charkha Pilot Project Scheme".**

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# APPENDIX VII

## I

## A BRIEF NOTE ON THE AMBAR CHARKHA PILOT PROJECT SCHEME

In addition to the laboratory tests which are being carried out on the Ambar Charkha, Government in November 1955, sanctioned a scheme known as the "Ambar Charkha Pilot Project Scheme" for carrying out field tests on the Ambar Charkha, with a view to assess its technical potentialities and to assess the degree of the acceptability by the handloom weavers of the yarn produced.

2. The scheme as sanctioned by Government, comprised the following:—

(i) opennig of 15 *vidyalayas;*

(ii) opening of 100 *prishramalyas* (training-*cum*-production centres);

(iii) opening of six functional offices—one each for co-ordination, manufacture of charkha sets, distribution of yarn, distribution of charkhas, training and inspection.

3. The scheme was estimated to cost Rs. 29,58,625 made up of Rs. 17,58,625 as grants and Rs. 12,00,000 as loans and was to be implemented through the agency of the Sarva Seva Sangh and other registered bodies.

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## II

## REPORT ON THE AMBAR CHARKHA PILOT PROGRAMME

### The Background

In pursuance of its undertaking to the Karve Committee to supply by April 1956, comprehensive and representative data on the potential productive capacity of the Ambar Charkha and the acceptability of the yarn turned out on it to the bulk of the handloom weavers, the All-India Khadi and Village Industries Board formulated in October 1955, a three-fold Pilot Programme. The Board's Ambar Charkha Pilot Programme envisaged: (i) the provision of an intensive six-weeks' training course to 400 selected instructors in 15 specially established *vidyalayas;* (ii) the establishment of 100 *Parishramalayas* all over the country to provide intensive training and practice for a minimum period of six weeks each, in the use of the Ambar Charkha and its accessories to new and old spinners and to verify whether, with that training and practice, an average spinner on the Ambar Charkha could produce 8 hanks of yarn from carding to spinning, or 16 hanks of yarn (only spinning) per day of 8 hours; and (iii) the distribution of Ambar yarn to handloom weavers to determine its acceptability to them. The report on the first two parts of the programme presented in the following pages is based on the report of the officer in charge of Ambar Charkha Training and the data collected during the fortnight March 28 and April 13, 1956 by the managers of the *Parishramalayas.* The data on the third part of the programme are being collected and report will shortly follow.

## Training of Instructors

2. The training programme for instructors envisaged the establishment of 15 *vidyalayas* at selected centres and the provision of an intensive six-weeks' training course to 400 workers deputed by the institutions in each region of the country during the period November 15—December 31, 1955. The Amber Charkha Samiti of the Sarva Seva Sangh, which was in executive charge of the entire Pilot Programme, set up 14 *vidyalayas* and trained 354 workers during the period. The region-wise location of the *vidyalayas* and the number of instructors trained at each are set out in Table I. Except the *vidyalaya* at Rajkot, which was started on December 17, 1955. all the others were set up to schedule to provide the requisite training to the selected candidates.

TABLE I

| Vidyalaya | Region | No. of instructors trained. |
|---|---|---|
| 1. Madhubani | Bihar | 40 |
| 2. Akbarpur | UttarPradesh | 34 |
| 3. Nagina | Uttar Pradesh | 30 |
| 4. Sabarmati | Gujerat | 17 |
| 5. Rajkot | Saurashtra | 20 |
| 6. Hubli | Karnatak | 13 |
| 7. Wardha | Madhya Pradesh | 29 |
| 8. Adampur-Doaba | Punjab | 23 |
| 9. Shivdaspura | Rajasthan | 20 |
| 10. Veerapandi | Tamilnad | 40 |
| 11. Avanghata | Bengal | 14 |
| 12. Kujendri | Orissa | 12 |
| 13. Ujjain | Madhya Bharat | 22 |
| 14. Kakinada | Andhra | 40 |
| | TOTAL | 354 |

3. Of the 354 candidates trained at the *vidyalayas* the majority, it is reported, were old, experienced khadi workers deputed by established institutions. The *vidyalayas* at Akbarpur and Nagina had, however, wholly new workers. Details are, however, not available to classify all the candidates into new and old khadi workers.

4. Although the establishment of each *vidyalaya* presented several initial difficulties, such as inadequacy of space, non-availability of Charkha sets, implements, tools, spare parts and raw materials, the majority of the *vidyalayas* completed the prescribed training syllabus. Of the 47 days between November 15 and December 31, the syllabus prescribed a work period of 40 days or 320 hours of training, of which 40 hours were reserved for instruction in theory and 280 hours for actual work on the Ambar Charkha. Owing to the inadequacy of space in the *vidyalaya* at Nagina (U.P.), which was located in the urban sector, non-availability of skilled carpenters locally in Adampur-Doaba (Punjab), and—the absence of trained carpenters in Adamghata (Bengal), the instructors' course fell short of the required standards at these *vidyalayas*, as uniformity in the quality of the Charkha sets could not be ensured. In spite of it, the programme of training was implemented to schedule.

## Parishramalayas

5. The main objective of the Ambar Charkha Pilot Programme was the verification of the claim that, given a minimum training and practice of six weeks each, an average spinner on the Ambar Charkha could produce 8 hanks of yarn from carding to spinning, or 16 hanks of yarn taking only spinning per day of 8 hours. Towards this end, the programme envisaged the establishment of 100 *Parishramalayas* all over the country for the collection of representative data on the performance of the spinners on the Ambar Charkha and its accessories. Each *Parishramalaya* was to be equipped with 60 Ambar Charkha sets and undertake training of 120 spinners. Thus, the programme sought to collect representative as well as comprehensive data on the average productive capacity of the spinner.

### *Establishment of Parishramalayas*

6. As against its original programme to establish 100 *Parishramalayas* during the period November 1955—March 1956, the Ambar Charkha Samiti set up 121 *Parishramalayas*, of which 114 were main, and 7 subsidiary *Parishramalayas*. All the main and subsidiary *Parishramalayas* worked full-time with the exception of two, one at Pusa Road (Bihar) and another in Ahmedabad (Gujerat) each of which worked wholly part-time, 4 hours and 2 hours respectively. The region-wise distribution of the *Parishramalayas* and the number of spinners who worked in each of them during the last fortnight March 28th—April 13th, classified according to their sex are set out in Table 2.

## TABLE 2

*Distribution of Parishramalayas*

| Region | No. of Parishrama-layas | Spinners* |  | Total |
|---|---|---|---|---|
|  |  | Male | Female |  |
| 1 | 2 | 3 | 4 | 5 |
| 1. Bengal . . . . . . . | 4 | 107 | 51 | 158 |
| 2. Andhra . . . . . . . | 12 | 116 | 195 | 311 |
| 3. Karnatak . . . . . . | 3 | 77 | 143 | 220 |
| 4. Maharashtra . . . . . . | 4 | 114 | 34 | 148 |
| 5. Gujerat . . . . . . . | 7 | 123 | 188 | 311 |
| 6. Kerala . . . . . . . | 3 | N.A. | N.A. | N.A. |
| 7. Malabar . . . . . . | 4 | 2 | 86 | 88 |
| 8. Tamilnad . . . . . | 12 | 134 | 222 | 356 |
| 9. Uttar Pradesh . . . . | 18 | 470 | 49 | 519 |
| 10. Utkal . . . . . . | 4 | 152 | 17 | 169 |
| 11. Punjab-PEPSU . . . . | 5 | .. | 225 | 225 |
| 12. Bihar . . . . . . | 22 | 382 | 307 | 689 |
| 13. Madhya Pradesh . . . . | 3 | N.A. | N.A. | N.A. |
| 14. Madhya Bharat . . . . | 5 | 56 | 120 | 176 |
| 15. Rajasthan . . . . . | 5 | 116 | 68 | 184 |
| 16. Hyderabad . . . . . | 4 | 10 | 12 | 22 |
| 17. Saurashtra & Kutch . . . | 5 | N.A. | N.A. | N.A. |
| 18. Delhi . . . . . . | 1 | 52 | 12 | 64 |
| TOTAL . . . . . . | 121 | 1,911 | 1,729 | 3,640 |

*Number of spinners shown here refer to those present during the last fortnight in the reporting *parishramalayas*.

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### *Coverage of Parishramalayas*

7. Of the 121 *Parishramalayas* set up during the period reports were received from 111 *Parishramalayas*. No reports were received from 3 *Parishramalayas* in Hyderabad, 3 *Parishramalayas* in Madhya Pradesh, 4 in Andhra and 4 in Bihar; 8 reports from Uttar Pradesh, 5 reports from Saurashtra, 1 each from Andhra, Utkal, Gujerat, Kerala and Malabar were rejected as they were incomplete; 2 reports from Punjab and 1 from Rajasthan were rejected because of incorrect reporting. Reports of 2 *Parishramalayas* in Kerala could not be taken for analysis as the training provided by them was less than the barest minimum. Thus, of the 121 *Parishramalayas* set up during the period, the report presented in the following pages covers only 84 *Parishramalayas* or about 70 per cent. of the total number set up. Region-wise analysis of the number and character of the reports is set out in Table 3.

## TABLE 3

*Analysis o Reports from Parishramalayas*

| Region | No. of Parishramalayas | No. that reported | No. of reports rejected/omitted | Cause | No. covered by the report |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Bengal . . | 4 | 4 | .. | .. | 4 |
| 2. Andhra . . | 12 | 8 | 5 | 4 no reports 1 rejected for incorrect reporting. | 7 |
| 3. Karnatak . | 3 | 3 | .. | .. | 3 |
| 4. Maharashtra . | 4 | 4 | .. | .. | 4 |
| 5. Gujerat . | 7 | 7 | 1 | incomplete. | 6 |
| 6. Kerala . . | 3 | 1 | 3 | 1 incomplete<br>2 no reports | .. |
| 7. Malabar . | 4 | 4 | 1 | incomplete. | 3 |
| 8. Tamilnad . | 12 | 12 | .. | .. | 12 |
| 9. Uttar Pradesh | 18 | 18 | 8 | incomplete. | 10 |
| 10. Utkal . . | 4 | 4 | 1 | incomplete | 3 |
| 11. Punjab-PEPSU | 5 | 5 | 2 | incorrect. | 3 |
| 12. Bihar . . | 22 | 18 | 4 | No report. | 18 |
| 13. Madhya Bharat | 5 | 5 | .. | .. | 5 |
| 14. Madhya Pradesh | 3 | Nil | 3 | No report. | Nil. |
| 15. Rajasthan . | 5 | 5 | 1 | incorrect. | 4 |
| 16. Hyderabad . | 4 | 1 | 3 | No report. | 1 |
| 17. Saurashtra-Kutch | 5 | 5 | 5 | incomplete. | Nil. |
| 18. Delhi . . | 1 | 1 | .. | .. | 1 |
| Total . | 121 | 105 | 37 | | 84 |

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### *Classification of Spinners*

8. The 121 *Parishramalayas* set up during the period admitted in all 4686 spinners, of whom only 3640 spinners were present during the last fortnight, the balance being absent due either to illness or to social obligations arising from the celebration of marriages or the advent of new year. Of the total number who worked during the last fortnight 1911 or about 52·5 per cent. were boys or men in the age group of 12—60, and 1729 or 47·5 per cent. were girls and women in the age group of 9—60. The ratio of men to women varied widely from region to region. Thus, while the majority of the spinners in *Parishramalayas* in Delhi, U.P., Utkal, Bengal, Maharashtra, Rajasthan and Madhya Bharat were men, those in the Punjab and Malabar were all women. The regional variation in the percentage distribution of spinners by sex is summed up in Table 4.

## TABLE 4

### *Percentage Distribution of Spinners by sex**

| Region | Men | Women |
|---|---|---|
| 1. Bengal | 67·7 | 32·3 |
| 2. Andhra | 37·3 | 62·7 |
| 3. Karnatak | 35·0 | 65·0 |
| 4. Maharashtra | 77·0 | 23·0 |
| 5. Gujerat | 39·6 | 60·4 |
| 6. Malabar | 2·3 | 97·7 |
| 7. Tamilnad | 37·7 | 62·3 |
| 8. U.P. | 90·6 | 9·4 |
| 9. Utkal | 89·6 | 10·4 |
| 10. Punjab | Nil | 100·0 |
| 11. Bihar | 55·5 | 44·5 |
| 12. Madhya Bharat | 31·9 | 68·1 |
| 13. Rajasthan | 53·0 | 37·0 |
| 14. Hyderabad | 45·4 | 54·6 |
| 15. Delhi | 81·8 | 18·2 |
| ALL-INDIA | 52·5 | 47·5 |

*Based on the abstract of Statement I.

9. Of the total spinners admitted by the *Parishramalayas,* the number of old spinners (boys or men, girls or women, with experience of handspinning on any of the many models of the Traditional Charkha) was on the whole insignificant. All the women spinners in the 22 *Parishramalayas* in Bihar and all the spinners in one *Parishramalaya* in Madhya Bharat were, however old spinners, the numbers of old spinners in the other *Parishramalayas* being altogether negligible. In other words, about 90 per cent. of the spinners admitted by the *Parishramalayas* all over India were altogether new spinners.

10. The number of weavers, men and women, or individuals belonging to the weavers' class also was very small. Except 3 *Parishramalayas* in Andhra and 1 in Gujerat, most of the *Parishramalayas* had either no weaver at all or had only an insignificant number. Details of this classification were, however, not called for and the oral reports of the managers of the *Parishramalayas* confirm that the number of weavers in the *Parishramalayas* was small.

### *Age and Sex*

11. The classification of the total number of spinners admitted by the *Parishramalayas* shows that 89·8 per cent. of the men and 76·5 per cent. of the women spinners were below 30 years while 68·3 per cent. of the men were in the age group of 19—30, and 45·6 per cent. of the women in this group. As against 30·9 per cent. of the women in the age group 9—18, only 21·5 per cent. of the men were in the age group of 12—18. The percentage of

spinners between 31 and 10 years as well as over 40, (men and women) was relatively small. The classification of the men and women spinners by their age-groups conclusively proves that hand-spinning on the Ambar Charkha is attractive to the bulk of the labour force in the rural areas and, unlike the traditional Charkha which was almost the exclusive monopoly of women, the Ambar Charkha can attract a sizeable number from among young men and engage them in productive activity. The region-wise variation in the percentage distribution of spinners by age and sex are set out in Table 5.

TABLE 5

*Percentage distribution of Spinners by age and sex*

| Region | Males | | | | Females | | | |
|---|---|---|---|---|---|---|---|---|
| | 12-18 years | 19-30 years | 31-40 years | 41 years & above | 12-18 years | 19-30 years | 31-40 years | 41 years & above |
| 1. Bengal . | 21·4 | 68·4 | 7·7 | 2·5 | 45·8 | 31·3 | 22·9 | .. |
| 2. Andhra . | 15·5 | 63·1 | 13·6 | 7·8 | 14·3 | 48·0 | 24·0 | 13·7 |
| 3. Karnatak | 26·1 | 63·0 | 7·6 | 3·3 | 30·0 | 46·3 | 19·4 | 4·3 |
| 4. Maharashtra | 33·3 | 57·7 | 6·3 | 2·7 | 17·6 | 50·0 | 17·6 | 14·8 |
| 5. Gujerat . | 27·8 | 54·5 | 14·4 | 3·3 | 21·5 | 56·1 | 20·2 | 2·2 |
| 6. Malabar . | .. | .. | .. | .. | 47·0 | 46·0 | 5·0 | 2·0 |
| 7. Tamilnad | 29·4 | 64·2 | 5·5 | 0·9 | 58·1 | 36·0 | 2·9 | 2·0 |
| 8. U.P. . | 6·5 | 93·2 | 0·3 | .. | 45·5 | 42·4 | 12·1 | .. |
| 9. Utkal . | 8·8 | 81·0 | 6·1 | 4·1 | 37·5 | 45·8 | 12·5 | 4·2 |
| 10. Punjab PEPSU | .. | .. | .. | .. | 40·9 | 38·7 | 16·4 | 4·0 |
| 11. Bihar . | 28·8 | 64·2 | 7·0 | .. | 25·2 | 49·0 | 21·2 | 4·6 |
| 12. Madhya Bharat . | 46·0 | 41·3 | 7·9 | 4·8 | 15·4 | 35·9 | 27·4 | 21·3 |
| 13. Rajasthan | 25·4 | 42·0 | 23·9 | 8·7 | 17·8 | 55·4 | 23·8 | 3·0 |
| 14. Hyderabad | 40·0 | 40·0 | .. | 20·0 | 33·3 | 66·7 | .. | .. |
| All India | 21·5 | 68·3 | 7·7 | 2·5 | 30·9 | 45·6 | 17·8 | 5·7 |

### *Size of the Parishramalayas*

12. Although the Pilot Programme envisaged equipping each *Parishramalaya* with 60 Ambar Charkha sets to provide intensive training for 120 spinners at each, the number of Charkha sets supplied to the *Parishramalayas* as well as the number admitted for training varied widely from region to region and as between the units in the same region. The size of the *Parishramalayas* varied from 143 spinners (total number admitted in Hubli, Karnatak) to 18 spinners in Tamilnad, and the number of Ambar Charkha sets supplied to each *Parishramalaya* also varied very widely. Although the programme envisaged the establishment of 20 *Parishramalayas* during November and 30 during December 1955 the majority of the *Parishramalayas* could be started only between the second week of January 1956 and the first half of the February 1956, owing to the difficulties in the distribution of Ambar Charkha sets due to

inordinate delays in the transport of Charkha sets and their assembly at the *Parishramalayas.* Thus, the size of the *Parishramalayas* and the duration of the training provided by them varied considerably from region to region and between units in the same region.

## Operational variation

13. Owing partly to the delayed start of the *Parishramalayas* in various regions, and partly to the late admission of a substantial number of spinners, the stipulated minimum period of 90 days of training and practice in the use of the Ambar Charkha and its accessories could not be provided to all the spinners. The majority of the *Parishramalayas* in the country worked on an average, for only 80 days except 9 *Parishramalayas,* each of which worked 90 days and over and 5 *Parishramalays* each of which worked less than 60 days. In other words, the majority of the spinners received as against of the minimum of three months' training (six weeks of training and six weeks of practice), the bare essentials of training in Ambar Charkha set without adequate practice. A point of additional significance which rendered the inadequacy of time even more important was the continued late admission of spinners, even when the time available for training them was altogether insufficient.

14. Out of the total number of 3,640 spinners working during the last fortnight, 845 spinners did not complete the minimum six weeks training in the Ambar Charkha and its accessories, and none could undergo the prescribed period of essential practice on the Ambar Charkha and its accessories. The frequency distribution shown in Statement 1 and Statement 2 together show that 65 spinners or a little less than 2 per cent. received training for a period of less than 25 days; 780 or 20 per cent. of the spinners barely completed the six weeks' course of training with no time whatever for practice on the Charkha set to acquire the minimum skill; 2,070 or 53 per cent. of the spinners had 4 weeks of practice after the completion of their basic training course; and only 1,005 or about 25 per cent. of the trainees practised for a little over 4 weeks but not the minimum period prescribed for practice.

## Training and Productivity

15. As a result mainly of the inadequate and widely varied periods of training of the spinners in the same *Parishramalaya,* there were wide variations in the performance of spinners in the same *Parishramalayas.* Of the 1946 spinners who received full-training and limited practice, 501 or 25·7 per cent. attained a productivity rate of 6 to 7 hanks per day and 23 per cent. attained a speed of 8 hanks and above. As against this, a larger percentage of those, who had a longer practice of over 4 weeks, attained a productivity rate of 6 hanks and above. Thus of 906 spinners who fall into this category 34.3 per cent. of 311 spinners attained productivity of 6 hanks and 325 or 36 per cent. attained a speed of over 8 hanks per day. Thus, the data on 84 *Parishramalays* summarised in Statement 1 throws into clear relief the positive correlation between training and

productivity of the spinners. The variation in the size and operational pattern of the *Parishramalayas* are faithfully reflected in the wide variations in the performance of the spinners. While over the whole country, 51 per cent. of the spinners who received training and practice for a minimum of 4 weeks attained a speed of 6 hanks and more per day of 8 hours, and 48 per cent. among them attained a speed of 8 hanks and above per day of 8 hours, the majority of the spinners who received training for 46, days and above were able to attain a speed of only 4-5 hanks per day. The regional variations in the percentage of spinners who attained a minimum productivity rate of 6 hanks and above per day of 8 hours are shown in Table 6.

TABLE 6

| Region | Regional average | Highest | Lowest |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Bengal | 30·3 | 45·2 | 19·3 |
| 2. Andhra | 15·7 | 52·6 | 12·7 |
| 3. Karnatak | 47·2 | 66·0 | 5·1 |
| 4. Maharashtra | 9·5 | 29·0 | 12·5 |
| 5. Gujerat | 34·1 | 67·2 | 5·9 |
| 6. Malabar | 42·1 | 70·0 | 8·1 |
| 7. Tamilnad | 58·7 | 100·0 | 5·5 |
| 8. Uttar Pradesh | 78·1 | 100·0 | 38·4 |
| 9. Utkal | 36·7 | 48·4 | 28·8 |
| 10. Punjab PEPSU | 7·6 | 19·7 | 3·0 |
| 11. Bihar | 59·7 | 100·0 | 8·5 |
| 12. Madhya Bharat | 28·5 | 54·1 | 3·6 |
| 13. Rajasthan | 58·7 | 52·4 | 13·2 |
| 14. Hyderabad | .. | .. | .. |
| 15. Delhi | 7·8 | .. | .. |

17. That the analysis presented above correspond to reality can be easily seen from the data on the work and output of the spinners set out in Statement II| In every region where, *Parishramalayas* operated, the output per hour of the spinners with incomplete training was considerably lower than that of those who had either complete training or complete training with limited practice. The abstract of Statement II (Table 7), which sets out the region-wise average productivity per hour, brings out clearly that the main reason for the failure of the majority of the spinners to attain the desired rate of productivity was training and training alone.

## Average Productivity

18. The details of the work and output summarised in Statement II relate only to composite spinning performance of the spinners in the output per spinner from carding to spinning. The abstract of Statement II (Table 7) presents the region-wise frequency distribution of spinners in accordance with their respective periods of training and the average region-wise output per hour. The data

show that as against the All-India average productivity per spinner of 0·64 hanks of yarn per hour or 5·12 hanks of yarn per day of eight hours, those who received full training and over four weeks' but less than the prescribed minimum of six weeks' practice had an average productivity rate of 0·75 hanks per hour or 6 hanks per day of eight hours; those who had training and about 4 weeks' practice a productivity rate of 5·2 hanks per day and those who barely completed training about only 4 hanks per day. The All-India trends, this analysis brings out into sharp relief, is true of every group of trainees in every region of which data are available. Thus, the frequency distribution of spinners conclusively proves that the inadequacy of practice was the primary reason for the relatively lower productivity of the spinners.

19. The trends in the rate of output per spinner in each group of trainees warrant the inference that the continuation of the *Parishramalayas* for one additional month and the collection of data on the output of spinners during the subsequent fortnight would have provided a completely different picture and a more reliable basis for an objective assessment of the productivity of the spinners on the Ambar Charkha.

## Variations in output

20. Although the average output per spinner has been smaller than 8 hanks of yarn per day of 8 hours, many *Parishramalayas* had a sizeable number of spinners whose output considerably exceeded the rate. Where the quality of the raw cotton supplied or locally available was satisfactory, output per day reached as high as 16 hanks of yarn from carding to spinning in Rajasthan, 15 hanks in Bihar and Tamilnad, 14 hanks in U.P., 12 hanks in Karnatak and well above 8 in several other regions as shown in the Abstract of Statement I. The analysis of the data on the output presented in Statement I shows that while the performance of the spinners in Uttar Pradesh, Bihar, Tamilnad, Malabar and Hubli and certain *Parishramalayas* in Rajasthan and Madhya Bharat was uniformly good, approximating or exceeding the rate of 8 hanks of yarn per day of 8 hours from carding to spinning, the average productivity rate in Bengal, Andhra, Maharashtra and a few centres in Gujerat and Karnatak was uniformly poor. The productivity rate attained by Utkal and Punjab and PEPSU regions was lower than the all-India average. The main reason for the relatively poorer performance of these *Parishramalayas* other than the inadequacy of training already explained above, was the poor quality of cotton available to most of them and the inability of the *Parishramalayas* owing to the lack of time to obtain better variety or at any rate cleaner local varieties of raw cotton. In Maharashtra, Andhra and Karnatak in particular, the productivity of the spinners was low owing to the very poor quality of raw cotton available to them from local sources. Thus, the quality of raw cotton was responsible for the relatively poorer performance of many *Parishramalayas* which started early enough to show better results.

21. Of some importance to the productivity rate attained by spinners is the time during which data were collected. Owing to

severe heat in most regions of the country during the months of March and April, a very large number of spinners were disabled by diseases such as dysentry, small-pox, chicken-pox and other diseases. Moreover, as these months coincided with the occurance of the new year several religious festivities and also the marriage season, attendance of the *Parishramalayas* as well as regularity of work was poor.

## Cotton and counts

22. The available data on the quality and quantity of cotton supplied to the various *Parishramalayas* are inadequate to present detailed analysis of cotton used and the counts spun. By and large, the average count of yarn spun by the *Parishramalayas* was 18's though the lowest count spun was 10's from Deshi cotton and highest spun was 84's from Surti. The main counts of yarn spun from various varieties of Jarilla ranged between 14's and 20's from Karungani, 13's to 18's, Cambodia 16's to 23's, from Vijay 18's to 20's and from Wardha-Nawsari 12's to 20's.

23. The scrutiny of the data in the wastage of cotton in the process of carding and spinning shows wide variation between region to region and between different units in the same region. The main cause of the variation in the percentage of wastage from unit to unit was the quality of the raw cotton. While the percentage of wastage was as small as 4 per cent. for good qualities such as Surti and Vijaya, it was as high as 25 per cent. for varieties such as red cotton and Jayadav. By and large, wastage, of raw cotton was reported to average 16 per cent., though detailed analytically acceptable data on the supply of raw cotton, weight of yarn spun, balance of slivers etc. are not available.

## Organization and Distribution

24. One of the main problems in the implementation of the Ambar Charkha Pilot Programme, particularly the establishment of the *Parishramalayas* to schedule, was the problem of the supply of the Ambar Charkha sets to each area in time. Owing to the inordinate delays in transport, Charkha sets could not reach the *Parishramalayas* in time and, consequently, training of the spinners could not be undertaken expeditiously. The limitation of time prevented training of an adequate number of local carpenters or mistries to set right defective Ambar Charkha sets or to prevent wrong assembly. Moreover, with only 14 Ambar Charkha *Saranjam* centres, the supply of Charkha sets to the whole country presented many irksome problems, underlining the need for regional self-sufficiency in *Saranjam* centres. The delay in the arrival of Charkha sets, the absence of trained local carpenters to assemble them right and also the lack of local sources of supply of spare parts together prevented effective functioning of the *Parishramalayas* and the provision of the prescribed training and practice in full.

25. The report on the first two parts of the programme presented in the earlier pages emphasises the need for adequate training and practice on the Ambar Charkha set to attain a daily productivity

of 8 hanks of yarn. The trends discernible from the data on the working of the *Parishramalayas* show that with longer practice the output of the majority of the spinners may have approximated the desired minimum.

To ensure the provision of extensive and expeditious training to spinners on the Ambar Charkha, *Saranjam Karyalayas* should as far as possible be set up on a region-wise basis, as reliance on distant sources of supply result in avoidable delays.

To maintain the output per hour of the desired level, adequate arrangements for the supply of appropriate raw cotton to production centres are essential.

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## STATEMENT I

| Parishramalaya | No. of days worked | Age group | No. of spinners |  |  | Training and productivity per day of 8 hours |  |  |  |  |  |  |  |  |  | Summary |  |  | Maxm. speed per day | Col. 17 as % of 6 | Col. 18 as % of 6 | Col. 19 as % of 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  | Between 46 and 75 days |  |  |  |  | 76 days and above |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Male | Female | Total | Below 4 hks | 4-5 hks | 6-7 hks | 8 hks & above | Total | Below 4 hks | 4-5 hks | 6-7 hks | 8 hks & above | Total | 6-7 hks | 8 hks & above | Total |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| *Bengal*— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Bihar Juria . . . | 74 | 14-35 | 39 | 2 | 41 | 14 | 10 | 8 | 3 | 35 | .. | .. | .. | .. | .. | 8 | 3 | 11 | 10 | 19·5 | 7·3 | 26·8 |
| 2. Nadia . . . | 108 | 9-40 | 7 | 32 | 39 | 3 | 6 | 2 | .. | 11 | 2 | 3 | 5 | 3 | 13 | 7 | 3 | 10 | 8 | 17·9 | 7·7 | 25·6 |
| 3. Katranka . . . | 49 | 13-39 | 27 | 9 | 36 | 3 | 5 | 7 | .. | 15 | .. | .. | .. | .. | .. | 7 | .. | 7 | 7 | 19·4 | .. | 19·4 |
| 4. Nazvi Bazar . . . | .. | 15-48 | 34 | 8 | 42 | 5 | 17 | 18 | 1 | 41 | .. | .. | .. | .. | .. | 18 | 1 | 19 | 8 | 42·8 | 2·4 | 45·2 |
| TOTAL . . . | .. | .. | 107 | 51 | 158 | 25 | 38 | 35 | 4 | 102 | 2 | 3 | 5 | 3 | 13 | 40 | 7 | 47 | .. | 25·9 | 4·4 | 30·3 |
| *Andhra*— |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Kandkur, Nellore . . | 66 | 15-50 | 21 | 24 | 45 | 7 | 9 | 5 | 4 | 25 | .. | .. | .. | .. | .. | 5 | 4 | 9 | 8 | 11·1 | 8·8 | 19·9 |
| 6. Guntur . . . | 84 | 19-45 | 14 | 36 | 50 | 10 | 21 | 10 | 2 | 43 | .. | .. | .. | .. | .. | 10 | 2 | 12 | 9 | 20·0 | 4·0 | 24·0 |
| 7. Chirala, Guntur . . | 80 | 14-56 | 3 | 32 | 35 | 31 | 2 | .. | .. | 33 | 3 | .. | .. | .. | 3 | .. | .. | .. | 4 | .. | .. | .. |
| 8. Chittur, Narayanavaram . | 84 | 15-45 | 3 | 31 | 34 | 1 | 11 | 9 | 9 | 30 | .. | .. | 1 | 1 | 2 | 10 | 10 | 20 | 8 | 31·3 | 31·3 | 62·6 |
| 9. Kurnool . . . | 115 | 12-50 | 19 | 44 | 63 | 8 | 15 | 3 | .. | 26 | 4 | 16 | 5 | .. | 25 | 8 | .. | 8 | 7 | 12·7 | .. | 12·7 |
| 10. Srikakulam . . | 73 | 16-52 | 19 | 20 | 39 | 20 | .. | .. | .. | 20 | .. | .. | .. | .. | .. | .. | .. | .. | 8 | .. | .. | .. |
| 11. Murapaka, Srikakulam . | 80 | 18-55 | 37 | 8 | 45 | 30 | .. | .. | .. | 30 | .. | .. | .. | .. | .. | .. | .. | .. | 4 | .. | .. | .. |
| TOTAL . . . | .. | .. | 116 | 195 | 311 | 107 | 58 | 27 | 15 | 207 | 7 | 16 | 6 | 1 | 30 | 33 | 16 | 49 | .. | 10·6 | 5·1 | 15·7 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Karnatak—* | | | | | | | | | | | | | | | | | | | | | | |
| 12. Hubli | 144 | 16-52 | 30 | 69 | 99 | 1 | 14 | 10 | .. | 25 | 1 | 9 | 35 | 21 | 66 | 45 | 21 | 66 | 13 | 45·0 | 21·0 | 66·0 |
| 13. Anekal, Bangalore | 102 | 18-40 | 14 | 25 | 30 | 1 | 12 | .. | .. | 13 | .. | 24 | .. | 2 | 26 | ... | 2 | 2 | 8 | .. | 5·1 | 5·1 |
| 14. Gurlhosur, Belgaum | 128 | 18-42 | 33 | 49 | 82 | .. | 1 | 3 | 1 | 5 | .. | 6 | 22 | 10 | 38 | 25 | 11 | 36 | 10 | 30·5 | 13·4 | 43·9 |
| TOTAL | ... | ... | 77 | 143 | 220 | 2 | 27 | 13 | 1 | 43 | 1 | 39 | 57 | 33 | 130 | 70 | 34 | 104 | .. | 31·8 | 15·4 | 47·2 |
| *Maharashtra—* | | | | | | | | | | | | | | | | | | | | | | |
| 15. Mandargi, Sholapur | 118 | 12-60 | 21 | 28 | 49 | 35 | .. | .. | .. | 35 | 25 | .. | .. | .. | 25 | .. | .. | .. | 4 | .. | .. | .. |
| 16. Patankar Ahmednagar | ... | 14-45 | 38 | 6 | 44 | 6 | 14 | 5 | 6 | 31 | ... | .. | .. | .. | .. | 5 | 6 | 11 | 10 | 13·1 | 15·9 | 29·0 |
| 17. Jategaon, Nasik | ... | 14-42 | 24 | .. | 24 | 4 | 8 | 3 | .. | 15 | .. | .. | .. | .. | .. | 3 | .. | 3 | 7 | 12·5 | .. | 12·5 |
| 18. Parola, E. Kandesh | 56 | 18-55 | 31 | .. | 31 | 12 | 17 | .. | .. | 29 | .. | .. | .. | .. | .. | .. | .. | ... | 5 | .. | .. | .. |
| TOTAL | ... | ... | 114 | 34 | 148 | 57 | 39 | 8 | 6 | 110 | 25 | .. | .. | .. | 25 | 8 | 6 | 14 | .. | 5·4 | 4·1 | 9·5 |
| *Gujerat—* | | | | | | | | | | | | | | | | | | | | | | |
| 19. Raipur, Ahmedabad | ... | 14-48 | .. | 34 | 34 | 10 | 15 | 2 | .. | 27 | .. | .. | .. | .. | .. | 2 | .. | 2 | 6 | 5·9 | .. | 5·9 |
| 20. Mahipatram, Ahmedabad | ... | 16-42 | .. | 61 | 61 | 6 | 9 | 7 | 8 | 30 | 6 | 7 | 14 | 3 | 30<br>28 | 21 | 11 | 32 | 11 | 34·4 | 18·0 | 52·4 |
| 21. Nadiad, Kera | 77 | 16-49 | 33 | 31 | 64 | 2 | 11 | 20 | 3 | 36 | 2 | 6 | 11 | 9 | 8 | 31 | 12 | 43 | 8 | 48·4 | 18·8 | 67·2 |
| 22. Nadiad, Khera | ... | 17-40 | 6 | 15 | 21 | 9 | 3 | .. | .. | 12 | 7 | 1 | .. | .. | | .. | .. | .. | 4 | .. | .. | .. |
| 23. Gunja, Mehsane | 84 | 12-50 | 15 | 38 | 53 | 5 | 21 | 10 | 2 | 38 | .. | .. | 2 | .. | 2 | 12 | 2 | 14 | 8 | 22·6 | 3·8 | 26·4 |
| 24. Karari, Surat | 92 | 15-43 | 69 | 9 | 78 | 19 | 16 | 6 | 1 | 42 | 4 | 8 | 5 | 3 | 20 | 11 | 4 | 15 | 9 | 14·1 | 54·2 | 19·2 |
| TOTAL | .. | .. | 123 | 188 | 311 | 51 | 75 | 45 | 14 | 185 | 19 | 22 | 32 | 15 | 88 | 77 | 29 | 106 | .. | 24·8 | 9·3 | 34·1 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Malabar*— | | | | | | | | | | | | | | | | | | | | | | |
| 25. Meenchanta, Kozhikode | 88 | 14-42 | 2 | 35 | 37 | 1 | 2 | .. | .. | 3 | .. | 13 | 2 | 1 | 16 | 2 | 1 | 3 | 8 | 5·4 | 2·7 | 8·1 |
| 26. Elapalle, „ | 88 | 13-35 | .. | 30 | 30 | 1 | 5 | 8 | 2 | 16 | .. | .. | 3 | 8 | 11 | 11 | 10 | 21 | 10 | 36·7 | 33·3 | 70·0 |
| 27. Mudapoolore, Palghat | 67 | 14-30 | .. | 21 | 21 | .. | 7 | 8 | 5 | 29 | .. | .. | .. | .. | .. | 8 | 5 | 13 | 10 | 38·1 | 23·8 | 61·9 |
| TOTAL | .. | .. | 2 | 86 | 88 | 2 | 14 | 16 | 7 | 39 | .. | 13 | 5 | 9 | 27 | 21 | 16 | 37 | .. | 23·9 | 18·2 | 42·1 |
| *Tamilnad*— | | | | | | | | | | | | | | | | | | | | | | |
| 28. Velampalayam, Madras | 104 | 10-50 | .. | 44 | 44 | 1 | 8 | 6 | .. | 15 | .. | .. | 6 | 7 | 13 | 12 | 7 | 19 | 9 | 27·3 | 15·9 | 43·2 |
| 29. Nanagondanvalasu | 72 | 14-35 | 13 | 3 | 16 | 5 | 8 | 3 | .. | 15 | .. | .. | .. | .. | .. | 3 | .. | 3 | 6 | 18·8 | .. | 18·8 |
| 30. Veerapandi, Madras | .. | 13-30 | .. | 26 | 26 | .. | 2 | 2 | 4 | 8 | .. | .. | 2 | 12 | 14 | 4 | 16 | 20 | 10 | 15·4 | 61·5 | 76·9 |
| 31. Sedapalayam, Madras | 65 | 12-40 | 6 | 36 | 42 | 1 | 5 | 14 | 9 | 29 | .. | .. | .. | .. | .. | 14 | 9 | 23 | 11 | 33·3 | 31·4 | 54·6 |
| 32 Pudupalayam, Madras | 59 | 12-45 | 8 | 5 | 13 | 2 | 2 | .. | .. | 4 | .. | .. | .. | .. | .. | .. | .. | .. | 4 | .. | .. | .. |
| 33. Sankarapandyapuram | 84 | 14-29 | 17 | 9 | 26 | .. | .. | 1 | 13 | 14 | .. | .. | .. | 12 | 12 | 1 | 25 | 26 | 15 | 3·8 | 96·2 | 100·0 |
| 34. Karivalamvandanellore | 64 | 12-31 | 20 | 31 | 51 | 4 | 9 | 6 | 32 | 51 | .. | .. | .. | .. | .. | 6 | 32 | 38 | 11 | 11·7 | 62·7 | 74·4 |
| 35. Kunnur, Madras | 78 | 10-50 | 30 | 10 | 40 | .. | .. | 3 | 25 | 28 | .. | .. | 7 | 5 | 12 | 10 | 30 | 40 | 11 | 25·0 | 75·0 | 100·0 |
| 36. Kulampalayam, Madras | 72 | 12-28 | 6 | 16 | 22 | .. | 4 | 5 | 6 | 15 | .. | .. | .. | .. | .. | 5 | 6 | 11 | 11 | 22·7 | 27·3 | 50·0 |
| 37. Kashilingamapalayam | 73 | 14-47 | 6 | 15 | 21 | .. | 1 | 6 | 12 | 19 | .. | .. | .. | .. | .. | 6 | 12 | 18 | 11 | 28·6 | 57·2 | 85·8 |
| 38. Natanvalasu Madras | 51 | 11-40 | 10 | 27 | 37 | .. | 7 | 6 | 4 | 17 | .. | .. | .. | .. | .. | 6 | 4 | 10 | 12 | 16·2 | 10·8 | 27·0 |
| 39. Attahipakam, Madras | 66 | N.A. | 18 | .. | 18 | 3 | 1 | 1 | .. | 5 | .. | .. | .. | .. | .. | 1 | .. | 1 | 6 | 5·5 | .. | 5·5 |
| TOTAL | .. | .. | 134 | 222 | 356 | 16 | 47 | 53 | 105 | 221 | .. | .. | 15 | 36 | 51 | 68 | 141 | 209 | .. | 19·1 | 39·6 | 58·7 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Uttar Pradesh—* | | | | | | | | | | | | | | | | | | | | | | |
| 40. Gandhi A Meerut | 83 | 18-35 | 42 | 8 | 50 | .. | 5 | 9 | 9 | 23 | .. | 3 | 7 | 14 | 24 | 16 | 23 | 39 | 11 | 32·00 | 46·0 | 78·0 |
| 41. Hapur U.P. | 83 | 14-40 | 30 | 14 | 44 | .. | .. | .. | .. | .. | 1 | 4 | 21 | 18 | 44 | 21 | 18 | 39 | 14 | 47·7 | 40.90 | 88.6 |
| 42. Hapur U.P. | 83 | 18-35 | 30 | 20 | 50 | .. | 1 | .. | .. | 11 | 11 | 12 | 13 | 13 | 49 | 13 | 23 | 36 | 10 | 26·0 | 46·0 | 72·0 |
| 43. Bulandshahar | .. | 14-24 | 72 | 7 | 79 | .. | 10 | 35 | 30 | 75 | .. | 1 | .. | .. | 1 | 35 | 30 | 65 | 10 | 44·3 | 37·9 | 82·2 |
| 44. Aligarh | 77 | 19-30 | 35 | .. | 35 | .. | 8 | 9 | 1 | 18 | .. | 4 | 11 | 2 | 17 | 20 | 3 | 23 | 10 | 57·1 | 8·5 | 65·6 |
| 45. Raipur, Saranpur | 70 | 17-30 | 37 | .. | 37 | .. | .. | 14 | 18 | 32 | .. | .. | .. | 3 | 3 | 14 | 21 | 35 | 13 | 37·8 | 56·7 | 94·5 |
| 46. Raipur, Saranpur | 70 | 18-25 | 40 | .. | 40 | .. | .. | 17 | 23 | 40 | .. | .. | .. | .. | .. | 17 | 23 | 40 | 12 | 42·5 | 57·5 | 100·0c |
| 47. Kandiyarganj, Aligarh | 77 | 18-24 | 39 | .. | 39 | 5 | 17 | 13 | 2 | 37 | .. | .. | .. | .. | .. | 13 | 2 | 15 | 10 | 33·3 | 5·1 | 38·4 |
| 48. Muradabad | .. | 18-30 | 69 | .. | 69 | 7 | 8 | 13 | 8 | 36 | 1 | 13 | 13 | 9 | 36 | 26 | 17 | 43 | 12 | 37·6 | 24·6 | 62·2 |
| 49. Nagina Bijnore | .. | 19-25 | 76 | .. | 76 | .. | 3 | 13 | 26 | 42 | .. | .. | 7 | 24 | 31 | 20 | 50 | 70 | 12 | 26·3 | 65·8 | 92·1 |
| TOTAL | .. | .. | 470 | 49 | 519 | 12 | 52 | 123 | 117 | 304 | 13 | 37 | 72 | 83 | 205 | 195 | 210 | 405 | .. | 37·6 | 40·5 | 78·1 |
| *Utkal—* | | | | | | | | | | | | | | | | | | | | | | |
| 50 Kushipal | 62 | 16-50 | 41 | 9 | 50 | .. | 1 | 6 | 10 | 17 | .. | .. | .. | .. | .. | 6 | 10 | 16 | 9 | 12·0 | 20·0 | 32·0 |
| 51. Digheri, Puri | 59 | 13-30 | 60 | .. | 60 | .. | 11 | 16 | 13 | 40 | .. | .. | .. | .. | .. | 16 | 13 | 29 | 10 | 26·7 | 21·7 | 48·4 |
| 52. Buhari, Balsore | 64 | 15-50 | 51 | 8 | 59 | 2 | 12 | 10 | 7 | 31 | .. | .. | .. | .. | .. | 10 | 7 | 17 | 12 | 16·9 | 11·9 | 28·8 |
| TOTAL | .. | .. | 152 | 17 | 169 | 2 | 24 | 32 | 30 | 88 | .. | .. | .. | .. | .. | 32 | 30 | 62 | .. | 18·9 | 17·8 | 36·7 |
| *Punjab and PEPSU—* | | | | | | | | | | | | | | | | | | | | | | |
| 53. Ambala City | 84 | 12-50 | .. | 67 | 67 | 21 | 5 | .. | .. | 26 | 1 | 12 | 2 | .. | 15 | 2 | .. | 2 | 6 | 3·0 | .. | 3·0 |
| 54. Coornool | 80 | 16-50 | .. | 80 | 80 | 33 | 3 | .. | .. | 36 | 21 | 1 | .. | .. | 22 | .. | .. | .. | 5 | .. | .. | .. |
| 55. Rajpura | 80 | 13-41 | .. | 78 | 78 | 5 | 17 | 13 | 2 | 37 | .. | .. | .. | .. | .. | 13 | 2 | 15 | 10 | 16·7 | 3·0 | 19·7 |
| TOTAL | .. | .. | .. | 225 | 225 | 59 | 25 | 13 | 2 | 99 | 22 | 13 | 2 | .. | 37 | 15 | 2 | 17 | .. | 6·7 | 0·9 | 7·6 |

*Bihar*—

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56. Simari, Darbhanga . | 82 | 18-35 | 87 | 10 | 47 | .. | 5 | 1 | 2 | 8 | .. | 2 | 9 | 29 | 40 | 10 | 31 | 41 | 15 | 21·3 | 66·0 | 87·3 |
| 57. Lalganj „ . | .. | 17-50 | 30 | 8 | 38 | .. | 2 | 2 | .. | 4 | .. | 4 | 12 | 18 | 34 | 14 | 18 | 32 | 13 | 37·0 | 47·3 | 84·3 |
| 58. Pusa Rd „ . | 84 | 13-40 | .. | 44 | 44 | .. | .. | .. | 12 | 12 | .. | .. | .. | 13 | 13 | .. | 25 | 25 | 12 | .. | 56·8 | 56·8 |
| 59. Samastipur „ . | 85 | 11-40 | 14 | 26 | 40 | .. | .. | 5 | 12 | 17 | .. | .. | 8 | 15 | 23 | 13 | 27 | 40 | 12 | 32·5 | 67·5 | 100·0 |
| 60 Poosa Rd „ . | 84 | 12-19 | 39 | .. | 39 | 5 | 29 | .. | .. | 34 | .. | 5 | .. | .. | 5 | .. | .. | .. | 5 | .. | .. | .. |
| 61. Shahpur „ . | 86 | 16-40 | 18 | 21 | 39 | .. | .. | .. | .. | .. | 3 | 8 | 21 | 7 | 39 | 21 | 7 | 28 | 10 | 53·8 | 17·9 | 71·7 |
| 62. Kapasia „ . | 85 | 18-45 | 30 | 9 | 39 | .. | .. | .. | .. | .. | .. | 4 | 27 | 8 | 39 | 27 | | 35 | 12 | 69·2 | 20·5 | 89·7 |
| 63. *Kampula „ . | 76 | 16-40 | 31 | 8 | 39 | .. | 4 | 10 | 25 | 39 | .. | .. | .. | .. | .. | .. | .. | .. | 12 | .. | .. | .. |
| 64. Pidakh, Mahmadpur . | .. | 18-40 | 36 | 5 | 41 | .. | 2 | .. | 1 | 3 | .. | 1 | 17 | 20 | 38 | 17 | 21 | 38 | 12 | 41·5 | 51·2 | 93·7 |
| 65. Madhepur . . . | 85 | 11-45 | 18 | 19 | 37 | 6 | .. | 6 | 2 | 14 | 4 | 6 | 9 | 4 | 23 | 15 | 6 | 21 | 8 | 40·5 | 16·2 | 56·7 |
| 66. Majholia, Darbhanga . | 81 | 14-56 | .. | 38 | 38 | .. | 1 | 10 | 14 | 25 | .. | 1 | 2 | 4 | 7 | 12 | 18 | 30 | 9 | 31·6 | 47·4 | 79·0 |
| 67. Narsinghpur, Muzaffarpur | 84 | 11-25 | 27 | 10 | 37 | .. | .. | .. | 4 | 4 | .. | .. | 7 | 27 | 33 | 11 | 26 | 37 | 12 | 29·7 | 70·3 | 100·0 |
| 68. Sipamarhi, Muzaffarpur . | 85 | 12-40 | 24 | 15 | 39 | .. | 2 | .. | .. | 2 | 1 | 10 | 10 | 13 | 34 | 10 | 13 | 23 | 12 | 25·6 | 33·5 | 58·9 |
| 69. Jagannathpur, Ranchi . | .. | 15-20 | 17 | 5 | 22 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 70. Patna . . . | 70 | 12-40 | 25 | 12 | 37 | .. | 1 | 26 | 11 | 38 | .. | .. | .. | .. | .. | 26 | 11 | 37 | 10 | 70·3 | 29·7 | 100·0 |
| 71. Monghir . . . | 80 | 12-45 | 3 | 37 | 40 | 1 | 8 | .. | 4 | 13 | 2 | 7 | 12 | 16 | 27 | 12 | 10 | 22 | 9 | 30·0 | 25·0 | 55·0 |
| 72. Sultanganj . . . | .. | 16-30 | 22 | 18 | 40 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 73. Ranipatra, Purnia . | 85 | 10-40 | 11 | 12 | 23 | 9 | 9 | .. | .. | 18 | .. | 7 | .. | 2 | 9 | .. | 2 | 2 | 8 | .. | 8·5 | 8·5 |
| TOTAL . . . | .. | .. | 382 | 307 | 689 | 21 | 63 | 60 | 87 | 231 | 10 | 55 | 134 | 165 | 364 | 188 | 3 | 411 | .. | 27·3 | 32·4 | 59·7 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Madhya Bharat—* | | | | | | | | | | | | | | | | | | | | | | |
| 74. Sabalghar, Mureira | 74 | 12-56 | 10 | 10 | 20 | ... | 18 | ... | 7 | 25 | ... | ... | ... | ... | ... | ... | 7 | 7 | 11 | ... | 35·0 | 35·0 |
| 75. Shopuri | 82 | 12-55 | 17 | 44 | 61 | 1 | 4 | 21 | 7 | 33 | ... | ... | 5 | ... | 5 | 26 | 7 | 33 | 9 | 42·6 | 11·5 | 54·1 |
| 76. Shajapur | 67 | 11-52 | 23 | 17 | 40 | 11 | 10 | 2 | ... | 23 | ... | ... | ... | ... | ... | 2 | ... | 2 | 8 | 5·0 | ... | 5·0 |
| 77. Nimuch, Mandsore | 79 | 14-60 | 2 | 25 | 27 | 2 | 4 | 4 | 3 | 13 | ... | 2 | ... | ... | 2 | 4 | 3 | 7 | 11 | 14·8 | 11·1 | 25·9 |
| 78. Khargone, Neemad | 82 | 12-55 | 4 | 24 | 28 | 12 | 8 | 1 | ... | 21 | ... | 1 | ... | ... | 1 | 1 | ... | 1 | 6 | 3·6 | ... | 3·6 |
| TOTAL | ... | ... | 56 | 120 | 176 | 26 | 44 | 28 | 17 | 115 | ... | 3 | 5 | ... | 8 | 33 | 17 | 50 | ... | 18·8 | 9·7 | 28·5 |
| *Rajasthan—* | | | | | | | | | | | | | | | | | | | | | | |
| 79. Khadibag, Jaipur | 83 | 14-40 | 31 | 37 | 68 | 4 | 26 | 13 | 12 | 55 | ... | 3 | 8 | 2 | 13 | 21 | 14 | 35 | 11 | 30·9 | 20·6 | 51·5 |
| 80. Samod, Jaipur | 81 | 10-50 | 39 | 27 | 66 | ... | 19 | 28 | 13 | 60 | ... | ... | ... | ... | ... | 28 | 13 | 41 | 9 | 42·4 | 9·9 | 52·3 |
| 81. Savai Madhavpur, Karoul | ... | 16-40 | 14 | 28 | 42 | 9 | 8 | 7 | 14 | 38 | 1 | ... | ... | 1 | 2 | 7 | 15 | 22 | 16 | 16·7 | 35·7 | 52·4 |
| 82. Udaipur | 76 | 10-51 | 63 | 13 | 76 | 10 | 6 | 5 | ... | 21 | ... | ... | 5 | ... | 5 | 10 | ... | 10 | 7 | 13·2 | ... | 13·2 |
| TOTAL | ... | ... | 116 | 68 | 184 | 23 | 59 | 53 | 39 | 174 | 1 | 3 | 13 | 3 | 20 | 66 | 42 | 108 | ... | 35·9 | 22·8 | 58·7 |
| *Hyderabad—* | | | | | | | | | | | | | | | | | | | | | | |
| 83. Metupalli | 82 | 12-55 | 10 | 12 | 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | ... | ... | ... |
| TOTAL | ... | ... | 10 | 12 | 22 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 7 | ... | ... | ... |
| *Delhi—* | | | | | | | | | | | | | | | | | | | | | | |
| 84. Narela | ... | ... | 52 | 12 | 64 | 30 | 31 | 5 | ... | 66 | ... | ... | ... | ... | ... | 5 | ... | 5 | 7 | 7·8 | ... | 7·8 |
| TOTAL | ... | | 52 | 12 | 64 | 30 | 31 | 5 | ... | 66 | ... | ... | ... | ... | ... | 5 | ... | 5 | ... | 7·8 | ... | 7·8 |
| GRAND TOTAL | ... | ... | 1911 | 1729 | 3640 | 431 | 570 | 501 | 444 | 1946 | 99 | 171 | 311 | 325 | 906 | 816 | 775 | 1591 | ... | 22·4 | 21·3 | 43·7 |

B. Column No. 17 = Col. No. 9 + Col. No. 14,
Column No. 18 = Col. No. 10 + Col. No. 15.

## ABSTRACT OF STATEMENT NO. I

### TRAINING AND PRODUCTIVITY

| Region | Age range | Men | Women | Total | Between 46 and 75 days |  |  |  |  | 76 days and above |  |  |  |  | Summary |  |  | Productivity range per day. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Below 4 hks. | 4—5 hks. | 6—7 hks. | 8 hks & above | Total | Below 4 khs. | 4—5 hks. | 6—7 hks. | 8 hks. & above | Total | 6—7 hks. | 8 hks. & above | Total |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1. Bengal . | 9—48 | 107<br>(117) | 51<br>(54) | 158<br>(171) | 25 | 38 | 35 | 4 | 102 | 2 | 3 | 5 | 3 | 13 | 40 | 7 | 47 | 7—10 |
| Percentage to respective totals . |  | 67·7 | 32·3 | .. | 24·5 | 37·3 | 34·3 | 3·9 | .. | 15·4 | 23·1 | 38·4 | 27·1 | .. | 85·1 | 14·9 | .. | .. |
| 2. Andhra . | 12—55 | 116<br>(125) | 195<br>(219) | 311<br>(344) | 107 | 58 | 27 | 15 | 207 | 7 | 16 | 6 | 1 | 30 | 33 | 16 | 49 | 2—9 |
| Percentage to respective totals . | .. | 37·3 | 62·7 | .. | 51·7 | 28·0 | 13·0 | 7·3 | .. | 23·3 | 53·3 | 20·0 | 3·4 | .. | 67·3 | 32·7 | .. | .. |
| 3. Karnatak . | 16—52 | 77<br>(78) | 143<br>(148) | 220<br>(226) | 2 | 27 | 13 | 1 | 43 | 1 | 39 | 57 | 33 | 130 | 70 | 34 | 104 | 8—13 |
| Percentage to respective totals | .. | 35·0 | 65·0 | .. | 4·7 | 62·8 | 30·2 | 2·3 | .. | 0·8 | 30·0 | 43·8 | 25·4 | .. | 67·3 | 32·9 | .. | .. |
| 4. Maharashtra | 12—50 | 114<br>(127) | 34<br>(44) | 148<br>(171) | 57 | 39 | 8 | 6 | 110 | 25 | .. | .. | .. | 25 | 8 | 6 | 14 | 4—10 |
| Percentage to respective totals |  | 77·0 | 23·0 | .. | 51·8 | 35·5 | 7·3 | 5·4 | .. | 100·0 | .. | .. | .. | .. | 59·1 | 40·9 | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5. Gujarat . | 12—50 | 123<br>(127) | 188<br>(194) | 311<br>(324) | 51 | 75 | 45 | 14 | 185 | 19 | 22 | 32 | 15 | 88 | 77 | 29 | 106 | 4—11 |
| Percentage to respective totals . |  | 39·6 | 60·4 | .. | 27·6 | 40·5 | 24·3 | 7·6 | .. | 21·6 | 25·0 | 36·4 | 17·0 | .. | 72·8 | 27·2 | .. | .. |
| 6. Malabar . | 13—42 | 2<br>(2) | 86<br>(87) | 88<br>(89) | 2 | 14 | 16 | 7 | 39 | .. | 13 | 5 | 9 | 27 | 21 | 16 | 37 | 8—10 |
| Percentage to respective totals . |  | 2·3 | 97·7 | .. | 5·1 | 35·8 | 41·2 | 17·9 | .. | .. | 48·1 | 18·6 | 33·3 | .. | 56·8 | 43·2 | .. | .. |
| 7. Tamilnad . | 10—50 | 134<br>(135) | 222<br>(227) | 356<br>(362) | 16 | 47 | 53 | 105 | 221 | .. | .. | 15 | 36 | 51 | 68 | 141 | 209 | 4—15 |
| Percentage to respective totals . |  | 37·7 | 62·3 | .. | 7·2 | 21·3 | 24·0 | 47·5 | .. | .. | .. | 29·4 | 70·6 | .. | 32·5 | 67·5 | .. | .. |
| 8. Uttar Pradesh. | 14—35 | 470<br>(473) | 49<br>(49) | 519<br>(522) | 12 | 52 | 123 | 117 | 304 | 13 | 37 | 72 | 83 | 205 | 195 | 210 | 405 | 10—14 |
| Percentage to respective totals . |  | 90·6 | 9·4 | .. | 3·9 | 17·1 | 40·5 | 38·5 | .. | 6·3 | 18·0 | 35·1 | 40·6 | .. | 48·2 | 51·8 | .. | .. |
| 9. Utkal . | 13—50 | 152<br>(165) | 17<br>(18) | 169<br>(183) | 2 | 24 | 32 | 30 | 88 | .. | .. | .. | .. | .. | 32 | 30 | 62 | 9—12 |
| Percentage to respective totals . |  | 89·6 | 10·4 | .. | 2·3 | 27·3 | 36·4 | 34·0 | .. | .. | .. | .. | .. | .. | 51·8 | 48·2 | .. |  |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.—Punjab—Pepsu. | 12—58 | .. <br> .. | 225 <br> (225) | 225 <br> (226) | 59 | 25 | 13 | 2 | 99 | 22 | 13 | 2 | .. | 37 | 15 | 2 | 17 | 5—18 |
| Percentage to respective totals . | | .. | 100·0 | .. | 59·6 | 25·3 | 13·1 | 2·0 | .. | 59·5 | 35·1 | 5·4 | .. | .. | 88·2 | 11·8 | .. | |
| 11. Bihar . | 10—56 | 382 <br> (387) | 307 <br> (307) | 689 <br> (694) | 21 | 63 | 60 | 87 | 231 | 10 | 55 | 134 | 165 | 364 | 188 | 223 | 411 | 5—15 |
| Percentage to respective totals . | | 55·5 | 44·5 | .. | 9·1 | 27·3 | 26·0 | 37·6 | .. | 2·7 | 15·1 | 36·8 | 45·4 | .. | 45·8 | 54·2 | .. | |
| 12. Madhya Bharat. | 11—60 | 56 <br> (64) | 120 <br> (135) | 176 <br> (199) | 26 | 44 | 28 | 17 | 115 | .. | 3 | 5 | .. | 8 | 33 | 17 | 50 | 6—11 |
| Percentage to respective totals . | | 31·9 | 68·1 | .. | 22·6 | 38·3 | 24·3 | 14·8 | .. | .. | 37·5 | 62·5 | .. | .. | 66·0 | 34·0 | .. | |
| 13. Rajasthan | 10—51 | 116 <br> (120) | 68 <br> (169) | 184 <br> (189) | 23 | 59 | 53 | 39 | 174 | 1 | 3 | 13 | 3 | 20 | 66 | 42 | 108 | 7—16 |
| Percentage to respective totals . | | 63·0 | 37·0 | .. | 13·2 | 33·9 | 30·5 | 22·4 | .. | 5·0 | 15·0 | 65·0 | 15·0 | .. | 61·9 | 38·1 | .. | |
| 14. Hyderabad | 12—55 | 10 | 12 | 22 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 7 |
| Percentage to respective totals . | | 45·4 | 54·6 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 15. Delhi . | | 52 <br> (54) | 12 <br> (12) | 64 <br> (66) | 30 | 31 | 5 | .. | 66 | .. | .. | .. | .. | .. | 5 | .. | 5 | 7 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percentage to respective totals . | | | 81·8 | 18·2 | .. | 45·5 | 47·0 | 7·5 | .. | .. | .. | .. | .. | .. | .. | .. | 100·0 | .. |
| ALL TOTAL . | | | 1911<br>(1984) | 1729<br>(1804) | 3640<br>(3788) | 431 | 570 | 501 | 444 | 1946 | 99 | 171 | 311 | 325 | 906 | 816 | 775 | 1591 |
| Percentage to respective totals . | | | 52·5 | 47·5 | .. | 22·1 | 29·3 | 25·7 | 22·9 | .. | 10·9 | 18·9 | 34·3 | 35·9 | .. | 51·3 | 48·1 | .. |

NOTE : The figures within brackets show number of spinners present during the last but one fortnight.

## STATEMENT 2

### FREQUENCY DISTRIBUTION OF SPINNERS

| Parishramalaya | Period of Training (days) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 to 25 | | | 26 to 45 | | | 46 to 75 | | | 76 and above | | | Total | | |
| | No. | Duration of work. | Prodn. (hks.) | No. | Duration of work. | Prodn. (hks.) | No. | Duration of work. | Prodn. (hks.) | No. | Duration of work. | Prodn. (hks.) | No. | Duration of work. | Prodn. (hks.) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| **BENGAL** | | | | | | | | | | | | | | | |
| 1. Bihar Juria | .. | .. | .. | 4 | 279 | 96 | 37 | 3215 | 1883 | .. | .. | .. | 41 | 3494 | 1979 |
| 2. Nadia | .. | .. | .. | 14 | 1397 | 555 | 11 | 1042 | 501 | 13 | 1441 | 946 | 38 | 3880 | 2002 |
| 3. Katranka | .. | .. | .. | 24 | 2676 | 1248 | 12 | 1432 | 812 | .. | .. | .. | 36 | 4108 | 2060 |
| 4. Nazvi Bazar | .. | .. | .. | 1 | 60 | 52 | 40 | 4452 | 2991 | .. | .. | .. | 41 | 4512 | 3043 |
| | .. | .. | .. | 43 | 4412 | 1951 | 100 | 10141 | 6187 | 13 | 1441 | 946 | 156 | 15994 | 9084 |
| **ANDHRA** | | | | | | | | | | | | | | | |
| 5. Ellora, Kandukur | .. | .. | .. | 11 | 820 | 445 | 27 | 1954 | 968 | .. | .. | .. | 38 | 2774 | 1413 |
| 6. Guntur | .. | .. | .. | 8 | 346 | 142 | 42 | 3091 | 1683 | .. | .. | .. | 50 | 3437 | 1825 |
| 7. Chirala | .. | .. | .. | 2 | 121 | 49 | 29 | 2213 | 1204 | 3 | 236 | 143 | 34 | 2570 | 1396 |
| 8. Chittoor Narayanvaram | 1 | 118 | 41 | 3 | 151 | 50 | 27 | 2982 | 1849 | 3 | 357 | 211 | 34 | 3608 | 2151 |
| 9. Kurnool | .. | .. | .. | 12 | 1421 | 627 | 26 | 2820 | 1406 | 25 | 2643 | 1493 | 63 | 6884 | 3526 |
| 10. Srikakulam | .. | .. | .. | 18 | 1633 | 153 | 20 | 1829 | 298 | .. | .. | .. | 38 | 3462 | 451 |
| 11. Murapaka | 1 | 66 | 4 | 14 | 1240 | 170 | 30 | 3231 | 683 | .. | .. | .. | 45 | 4537 | 857 |
| | 2 | 184 | 45 | 68 | 5732 | 1636 | 201 | 18120 | 8091 | 31 | 3236 | 1847 | 302 | 27272 | 11619 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KARNATAK | | | | | | | | | | | | | | | |
| 12. Hubli | .. | .. | .. | 11 | 982 | 584 | 26 | 2227 | 1509 | 65 | 6091 | 4973 | 102 | 9300 | 7066 |
| 13. Anekal, Bangalore | .. | .. | .. | 28 | 2372 | 948 | 18 | 1278 | 705 | 26 | 1898 | 1202 | 72 | 5548 | 2855 |
| 14. Gurlhosur | .. | .. | .. | 39 | 4372 | 2487 | 5 | 521 | 404 | 38 | 3733 | 3155 | 82 | 8626 | 6046 |
| | .. | .. | .. | 78 | 7726 | 4019 | 49 | 4026 | 2618 | 129 | 11722 | 9330 | 256 | 23474 | 15967 |
| MAHARASHTRA | | | | | | | | | | | | | | | |
| 15. Mandargi | .. | .. | .. | 5 | 375 | 206 | 21 | 1434 | 833 | 21 | 1651 | 1187 | 47 | 3460 | 2226 |
| 16. Patankar | .. | .. | .. | 13 | 1048 | 373 | 30 | 2727 | 1262 | .. | .. | .. | 43 | 3775 | 1635 |
| 17. Jategaon | 1 | 82 | 41 | 9 | 686 | 358 | 13 | 991 | 557 | .. | .. | .. | 23 | 1759 | 956 |
| 18. Parola | .. | .. | .. | .. | .. | .. | 30 | 2888 | 2348 | .. | .. | .. | 30 | 2888 | 2348 |
| | 1 | 82 | 41 | 27 | 2109 | 937 | 94 | 8040 | 5000 | 21 | 1651 | 1187 | 143 | 11882 | 7165 |
| GUJERAT | | | | | | | | | | | | | | | |
| 19. Raipur | .. | .. | .. | 5 | 300 | 248 | 28 | 1680 | 1586 | .. | .. | .. | 33 | 1980 | 1834 |
| 20. Mahipatram | 2 | 240 | 32 | 2 | 240 | 131 | 26 | 3120 | 2192 | 31 | 3720 | 2350 | 61 | 7320 | 4705 |
| 21. Nadiad | .. | .. | .. | 1 | 40 | 17 | 45 | 4137 | 1203 | 39 | 3971 | 2453 | 85 | 8148 | 5173 |
| 22. Nadiad | .. | .. | .. | .. | .. | .. | 32 | 3547 | 4222 | 32 | 3568 | 4164 | 64 | 7115 | 4380 |
| 23. Goonja | 5 | 321 | 88 | 10 | 544 | 164 | 35 | 2294 | 795 | 3 | 260 | 67 | 53 | 3419 | 1114 |
| 24. Zarari, Surat | .. | .. | .. | 17 | 1439 | 651 | 43 | 3809 | 1895 | 18 | 1464 | 926 | 78 | 6712 | 3412 |
| | 7 | 561 | 120 | 35 | 2563 | 1211 | 209 | 18587 | 11393 | 123 | 12983 | 7960 | 374 | 34694 | 20684 |
| MALABAR | | | | | | | | | | | | | | | |
| 25. Meenchank | .. | .. | .. | 18 | 2008 | 590 | 3 | 328 | 135 | 16 | 1834 | 928 | 37 | 4170 | 1653 |
| 26. Elapalle | .. | .. | .. | 3 | 320 | 129 | 16 | 1842 | 881 | 11 | 1218 | 688 | 30 | 3450 | 1698 |
| 27. Mudalpoolor | .. | .. | .. | 3 | 200 | 110 | 18 | 2056 | 1265 | .. | .. | .. | 21 | 2256 | 1375 |
| | .. | .. | .. | 24 | 2528 | 829 | 37 | 4226 | 2281 | 27 | 3122 | 1616 | 88 | 9876 | 4726 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TAMILNAD** | | | | | | | | | | | | | | | |
| 28. Valampalayam | .. | .. | .. | 17 | 1736 | 1181 | 14 | 1640 | 1014 | 18 | 2144 | 1769 | 49 | 5520 | 3964 |
| 29. Nainagondanvalasu | .. | .. | .. | .. | .. | .. | 10 | 756 | 561 | .. | .. | .. | 10 | 756 | 561 |
| 30. Veerapandi | .. | .. | .. | 5 | 438 | 333 | 8 | 738 | 656 | 13 | 1416 | 1519 | 26 | 2592 | 2508 |
| 31. Sedapalayam | .. | .. | .. | 13 | 1457 | 982 | 29 | 3039 | 2753 | .. | .. | .. | 42 | 4496 | 3735 |
| 32. Pudupalayam | 1 | 54 | 14 | 8 | 842 | 259 | 4 | 446 | 192 | .. | .. | .. | 13 | 1342 | 465 |
| 33. Sankarapandiapuram | 1 | 89 | 141 | .. | .. | .. | 7 | 591 | 682 | 18 | 1843 | 2401 | 26 | 2523 | 3224 |
| 34. Karvalamvandanellore | 3 | 100 | 86 | 3 | 188 | 200 | 46 | 4129 | 3799 | .. | .. | .. | 52 | 4417 | 4085 |
| 35. Kunnur | .. | .. | .. | 3 | 201 | 241 | 25 | 2110 | 2220 | 12 | 1221 | 1220 | 40 | 3532 | 3681 |
| 36. Kullampalayam | .. | .. | .. | 7 | 792 | 837 | 15 | 1776 | 1554 | .. | .. | .. | 22 | 2568 | 2391 |
| 37. Kasilingapalayam | .. | .. | .. | 2 | 240 | 194 | 19 | 2096 | 2081 | .. | .. | .. | 21 | 2336 | 2275 |
| 38. Nattanvalasu | 1 | 8 | 8 | 14 | 1256 | 807 | 16 | 1684 | 1417 | .. | .. | .. | 31 | 2948 | 2232 |
| 39. Atthipakam | 3 | 184 | 52 | 8 | 488 | 156 | 4 | 366 | 144 | .. | .. | .. | 15 | 1038 | 352 |
| | 9 | 435 | 301 | 80 | 7638 | 5190 | 197 | 19371 | 17073 | 61 | 6624 | 6909 | 347 | 34068 | 29473 |
| **UTTAR PRADESH** | | | | | | | | | | | | | | | |
| 40. Meerut | .. | .. | .. | 3 | 302 | 163 | 25 | 2522 | 1728 | 22 | 2278 | 1766 | 50 | 5102 | 3657 |
| 41. Hapur | 1 | 26 | 15 | .. | .. | .. | .. | .. | .. | 48 | 4738 | 2605 | 49 | 4764 | 2620 |
| 42. Hapur | .. | .. | .. | .. | .. | .. | 44 | 3987 | 2899 | .. | .. | .. | 44 | 3987 | 2899 |
| 43. Bulandashahar | .. | .. | .. | 4 | 414 | 193 | 75 | 7397 | 4996 | .. | .. | .. | 79 | 7811 | 5189 |
| 44. Aligarh | .. | .. | .. | .. | .. | .. | 18 | 1159 | 780 | 17 | 1118 | 788 | 35 | 2277 | 1568 |
| 45. Rampur | .. | .. | .. | 1 | 118 | 74 | 39 | 3832 | 2782 | .. | .. | .. | 40 | 3950 | 2856 |
| 46. Rampur | .. | .. | .. | 2 | 56 | 39 | 32 | 3117 | 2383 | 3 | 342 | 296 | 37 | 3515 | 2718 |
| 47. Kaudiarganj | .. | .. | .. | 1 | 84 | 53 | 36 | 1960 | 1444 | .. | .. | .. | 37 | 2044 | 1497 |
| 48. Muradabad | .. | .. | .. | .. | .. | .. | 33 | 4177 | 2148 | 35 | 3971 | 2737 | 68 | 8248 | 4885 |
| 49. Nagina | .. | .. | .. | 1 | 37 | 23 | 45 | 4625 | 3224 | 30 | 3129 | 2646 | 76 | 7801 | 5893 |
| | 1 | 26 | 15 | 12 | 1011 | 545 | 347 | 32776 | 22384 | 155 | 15586 | 10838 | 515 | 42399 | 33782 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UTKAL | | | | | | | | | | | | | | | |
| 50. Kushiapal | 2 | 152 | 42 | 50 | 5424 | 2238 | 53 | 7168 | 3031 | .. | .. | .. | 105 | 12744 | 5311 |
| 51. Dighari | 2 | 176 | 77 | 17 | 1880 | 758 | 41 | 4656 | 2663 | .. | .. | .. | 60 | 6712 | 3498 |
| 52. Duhari | 3 | 296 | 100 | 22 | 2328 | 1013 | 32 | 3348 | 2238 | .. | .. | .. | 57 | 5972 | 3351 |
| 53. Beguniapath | 5 | 328 | 119 | 33 | 3248 | 1270 | 76 | 9044 | 3876 | .. | .. | .. | 114 | 12620 | 5265 |
| | 12 | 952 | 338 | 122 | 12880 | 5279 | 202 | 24216 | 11808 | .. | .. | .. | 336 | 38048 | 17425 |
| PUNJAB—PEPSU | | | | | | | | | | | | | | | |
| 54. Ambala City | 1 | 60 | 13 | 20 | 1910 | 552 | 31 | 2930 | 1428 | 15 | 1386 | 1115 | 67 | 6286 | 3108 |
| 55. Coornool | .. | .. | .. | 22 | 1819 | 700 | 36 | 2417 | 1770 | 22 | 1993 | 1203 | 80 | 6229 | 3673 |
| 56. Rajpura | 1 | 77 | 34 | 30 | 2859 | 1480 | 32 | 3099 | 2146 | 15 | 1381 | 963 | 78 | 7416 | 4633 |
| | 2 | 137 | 47 | 72 | 6588 | 2732 | 99 | 8446 | 5344 | 52 | 4760 | 3291 | 225 | 19931 | 11414 |
| BIHAR | | | | | | | | | | | | | | | |
| 57. Simari | .. | .. | .. | .. | .. | .. | 9 | 768 | 437 | 39 | 4536 | 3913 | 48 | 5304 | 4350 |
| 58. Lalganj | .. | .. | .. | .. | .. | .. | 3 | 184 | 93 | 36 | 3164 | 2840 | 39 | 3348 | 2933 |
| 59. Pusa Road | .. | .. | .. | .. | .. | .. | 34 | 1582 | 1426 | 5 | 292 | 265 | 39 | 1874 | 1691 |
| 60. Samashpur | .. | .. | .. | .. | .. | .. | 16 | 1504 | 1377 | 24 | 2300 | 2034 | 40 | 3804 | 3411 |
| 61. Pusa Road | 1 | 48 | 48 | 18 | 2160 | 1604 | 11 | 1070 | 1113 | 13 | 1414 | 1575 | 43 | 4692 | 4292 |
| 62. Shahpur | .. | .. | .. | .. | .. | .. | .. | .. | .. | 39 | 4166 | 2084 | 39 | 4166 | 2084 |
| 63. Kapasia | .. | .. | .. | .. | .. | .. | 3 | 307 | 255 | 37 | 3956 | 3503 | 40 | 4263 | 3758 |
| 64. Kamtola | .. | .. | .. | .. | .. | .. | 39 | 3349 | 3228 | .. | .. | .. | 39 | 3349 | 3228 |
| 65. Mohamadpur | .. | .. | .. | .. | .. | .. | 3 | 227 | 103 | 38 | 3695 | 3847 | 41 | 3922 | 3950 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 66. Madhepur | .. | .. | .. | .. | .. | .. | 13 | 935 | 696 | 21 | 1932 | 1391 | 34 | 2867 | 2087 |
| 67. Najholia | .. | .. | .. | 6 | 392 | 389 | 30 | 2059 | 2027 | 2 | 140 | 133 | 38 | 2591 | 259 |
| 68. Narsinghpur | .. | .. | .. | .. | .. | .. | 4 | 287 | 257 | 33 | 2438 | 2055 | 37 | 2725 | 2312 |
| 69. Sitamarhi | .. | .. | .. | 3 | 360 | 208 | 2 | 240 | 99 | 34 | 4200 | 3163 | 39 | 4800 | 3470 |
| 70. Jagannathpur | 2 | 48 | 9 | 19 | 2046 | 566 | .. | .. | .. | .. | .. | .. | 21 | 2094 | 5575 |
| 71. Patna | .. | .. | .. | .. | .. | .. | 37 | 3976 | 2740 | .. | .. | .. | 37 | 3976 | 2740 |
| 72. Monghyr | .. | .. | .. | .. | .. | .. | 12 | 1027 | 538 | 28 | 2728 | 1381 | 40 | 3755 | 1919 |
| 73. Sultanganj | 2 | 240 | 90 | 38 | 4560 | 2148 | .. | .. | .. | .. | .. | .. | 40 | 4800 | 2238 |
| 74. Ranipatra | .. | .. | .. | 1 | 27 | 22 | 12 | 722 | 611 | 10 | 715 | 643 | 23 | 1474 | 1276 |
|  | 5 | 336 | 147 | 85 | 9545 | 4937 | 228 | 18237 | 15000 | 359 | 35676 | 28827 | 677 | 63794 | 84911 |
| MADHYA BHARAT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75. Sabalgarh | .. | .. | .. | .. | .. | .. | 22 | 2528 | 1899 | .. | .. | .. | 22 | 2528 | 1899 |
| 76. Shivpuri | .. | .. | .. | 23 | 1766 | 1193 | 33 | 2729 | 2348 | 550 | 550 | 428 | 61 | 5045 | 3969 |
| 77. Shajapur | 4 | 208 | 93 | 13 | 1240 | 481 | 22 | 1848 | 882 | .. | .. | .. | 39 | 3296 | 1456 |
| 78. Neemuch | 4 | 196 | 121 | 9 | 587 | 395 | 11 | 1143 | 967 | 2 | 228 | 160 | 26 | 2154 | 1643 |
| 79. Khargon | .. | .. | .. | 7 | 551 | 155 | 22 | 1476 | 686 | 1 | 100 | 42 | 30 | 2127 | 883 |
|  | 8 | 404 | 214 | 52 | 4144 | 2224 | 110 | 9724 | 6782 | 8 | 878 | 630 | 178 | 15150 | 9850 |
| RAJASTHAN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80. Khadi Baug | .. | .. | .. | 1 | 53 | 35 | 54 | 5547 | 4595 | 13 | 1136 | 950 | 68 | 6736 | 5580 |
| 81. Kamod | .. | .. | .. | 7 | 656 | 396 | 59 | 5926 | 3741 | .. | .. | .. | 66 | 6582 | 4137 |
| 82. Savaimadhaopur | 1 | 80 | 13 | .. | .. | .. | 31 | 2480 | 1923 | 8 | 640 | 437 | 40 | 3200 | 2373 |
| 83. Udaipur | 17 | 1367 | 466 | 20 | 1532 | 569 | 22 | 1759 | 885 | 5 | 361 | 258 | 64 | 5019 | 2178 |
|  | 18 | 1447 | 479 | 28 | 2241 | 1000 | 166 | 15712 | 11144 | 26 | 2137 | 1645 | 238 | 21537 | 14268 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HYDERABAD | | | | | | | | | | | | | | | |
| 84. Metpalli . . . . . | .. | .. | .. | 22 | 2177 | 1786 | .. | .. | .. | .. | .. | .. | 22 | 2177 | 1786 |
| | .. | .. | .. | 22 | 2177 | 1786 | .. | .. | .. | .. | .. | .. | 22 | 2177 | 1786 |
| DELHI | | | | | | | | | | | | | | | |
| 85. Narela . . . . . | .. | .. | .. | 32 | 3847 | 1904 | 31 | 3750 | 1854 | .. | .. | .. | 63 | 7597 | 3758 |
| | .. | .. | .. | 32 | 3847 | 1904 | 31 | 3750 | 1854 | .. | .. | .. | 63 | 7597 | 3758 |
| GRAND TOTAL . . . | 65 | 4564 | 1747 | 780 | 75141 | 36180 | 2070 | 195372 | 126959 | 1005 | 99816 | 75026 | 3920 | 374893 | 239912 |

# TABLE 7

## TRAINING WORK AND OUTPUT

| No. of training (days) | 1 to 25 | | | | 26 to 45 | | | | 46 to 75 | | | | 76 & above | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Region | No. | Duration of work (Hrs.) | Production (Hnks) | Rate per hour | No. | Duration of work (Hrs.) | Production (Hnks) | Rate per Hr. | No. | Duration of work (Hrs.) | Production (Hnks) | Rate per Hr. | No. | Duration of work (Hrs.) | Production (Hnks) | Rate per Hr. | No. | Duration of work (Hrs.) | Prodn. (Hnks) | Rate per hr. |
| 1. Bengal | ... | ... | ... | ... | 43 | 4412 | 1951 | 0·44 | 100 | 10141 | 6187 | 0·61 | 13 | 1441 | 946 | 0·65 | 156 | 15994 | 9084 | 0·56 |
| 2. Andhra | 2 | 184 | 45 | 0·24 | 68 | 5732 | 1636 | 0·28 | 201 | 18120 | 8091 | 0·45 | 31 | 3236 | 1847 | 0·57 | 302 | 27272 | 11619 | 0·43 |
| 3. Karnatak | ... | ... | ... | ... | 78 | 7726 | 4019 | 0·52 | 49 | 4026 | 2618 | 0·65 | 129 | 11722 | 9330 | 0·79 | 256 | 23574 | 15967 | 0·68 |
| 4. Maharashtra | 1 | 82 | 41 | 0·50 | 27 | 2109 | 937 | 0·44 | 94 | 8040 | 5000 | 0·62 | 21 | 1651 | 1187 | 0·71 | 143 | 11882 | 7165 | 0·60 |
| 5. Gujerat | 7 | 561 | 120 | 0·21 | 35 | 2563 | 1211 | 0·47 | 209 | 18587 | 11394 | 0·61 | 123 | 12983 | 7960 | 0·61 | 374 | 34694 | 20684 | 0·59 |
| 6. Malabar | ... | ... | ... | ... | 24 | 2528 | 829 | 0·33 | 37 | 4226 | 2281 | 0·54 | 27 | 3122 | 1616 | 0·51 | 88 | 9876 | 4726 | 0·47 |
| 7. Tamil Nad | 9 | 435 | 301 | 0·69 | 80 | 7638 | 5190 | 0·68 | 197 | 19371 | 17073 | 0·88 | 61 | 6624 | 6909 | 1·04 | 347 | 34068 | 29473 | 0·87 |
| 8. Uttar Pradesh | 1 | 26 | 15 | 0·57 | 12 | 1011 | 545 | 0·53 | 347 | 32776 | 22384 | 0·68 | 155 | 15586 | 10838 | 0·70 | 515 | 49399 | 33782 | 0·68 |
| 9. Utkal | 12 | 952 | 338 | 0·35 | 122 | 12880 | 5279 | 0·41 | 202 | 24216 | 11808 | 0·49 | ... | ... | ... | ... | 336 | 38048 | 17425 | 0·46 |
| 10. Punjab-Pepsu | 2 | 137 | 47 | 0·34 | 72 | 6588 | 2732 | 0·41 | 99 | 8446 | 5344 | 0·63 | 52 | 4760 | 3291 | 0·69 | 225 | 19931 | 11414 | 0·57 |
| 11. Bihar | 5 | 336 | 147 | 0·44 | 85 | 9545 | 4937 | 0·52 | 228 | 18237 | 15000 | 0·82 | 359 | 35676 | 28827 | 0·81 | 677 | 63794 | 48911 | 0·77 |
| 12. Madhya Bharat | 8 | 404 | 214 | 0·53 | 52 | 4144 | 2244 | 0·54 | 110 | 9724 | 6782 | 0·70 | 8 | 878 | 630 | 0·71 | 178 | 15150 | 9850 | 0·65 |
| 13. Rajasthan | 18 | 1447 | 479 | 0·33 | 28 | 2241 | 1000 | 0·45 | 166 | 15712 | 11144 | 0·71 | 26 | 2137 | 1645 | 0·77 | 238 | 21537 | 14268 | 0·66 |
| 14. Hyderabad | ... | ... | ... | ... | 22 | 2177 | 1786 | 0·82 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2177 | 1786 | 0·82 |
| 15. Delhi | ... | ... | ... | ... | 32 | 3847 | 1904 | 0·49 | 31 | 3750 | 1854 | 0·49 | ... | ... | ... | ... | 2263 | 7597 | 3758 | 0·49 |
| Total | 65 | 4564 | 1747 | 0·38 | 780 | 75141 | 36180 | 0·48 | 2070 | 195372 | 26959 | 0·65 | 1005 | 99816 | 75026 | 0·75 | 3920 | 374893 | 239912 | 0·64 |

## III

## Report on weaving

26. With a view to assessing the acceptability of Ambar yarn to the handloom weavers in the country, the Board had undertaken to organize the distribution of yarn to them, and collect comparative data on the output of cloth with mill yarn and Ambar yarn by different weavers in different regions of the country and also their opinion on the weaving qualities of Ambar yarn. In pursuance of this two-fold undertaking, the Ambar Charkha Samiti organized the distribution of Ambar yarn spun by the spinner-trainees at the *Parishramalayas* among local weavers in as many regions as possible. As this work could be undertaken only after the collection of the data on the performance of the spinner-trainees, and as the collection of comparative data on weaving takes considerable time, as it involves weaving of identical pieces of cloth with mill-yarn and Ambar yarn, reports on the weaving experiments in Punjab, Uttar Pradesh, Bengal, Orissa, Madhya Pradesh, Madhya Bharat, Rajasthan, Malabar and Travancore-Cochin have not yet been received. As an analysis of the results of the weaving experiments conducted by the Ambar Charkha Samiti is urgently required, the following paragraphs present a consolidated report based on the limited information received so far.

### *The coverage*

27. The reports on the weaving experiments conducted all over the country relate to 50 weavers in Andhra, Karnatak, Maharashtra, Gujerat, Tamilnad, Bihar and Saurashtra. The available details of the performance of each weaver in each region on Ambar yarn and mill yarn are set out in Statement III. Of the reports on 50 weavers that were received, six from Andhra, two from Karnatak and one from Saurashtra were rejected. While the six reports from Andhra were rendered defective, partly by the misinterpretation of the terms "soaking of yarn" as connoting "the time during which the yarn was soaked" and partly by the arbitrary division of an 18-yard piece of cloth of given specifications into three six-yard pieces for assessing the weaving time, reports from Karnatak and Saurashtra did not furnish, comparative data or even weaving data on the Ambar yarn. Consequently, nine of the reports received so far had to be wholly omitted, and the report thus relates to only 82 per cent. of the weavers covered by the experiment.

### *Classification of weavers and looms*

28. Of the 41 weavers for whom analytically acceptable and comparative data are available, 23 or 56 per cent. were weavers who had previous experience of weaving with handspun yarn and the rest (except one of whom information is not available) were mill-yarn weavers and were altogether new to weaving with hand-spun yarn. The classification of spinners into old and new is presented in Table 8.

## TABLE 8

### *Classification of weavers*

| Region | Old* | New** | Total |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. Andhra . . . . . . . | 4 | .. | 4 |
| 2. Karnatak . . . . . . . | 2 | 2 | 5† |
| 3. Maharashtra . . . . . . | 1 | 6 | 7 |
| 4. Gujerat . . . . . . . | 1 | .. | 1 |
| 5. Tamilnad . . . . . . . | 2 | 1 | 3 |
| 6. Bihar . . . . . . . | 11 | 8 | 19 |
| 7. Saurashtra . . . . . . | 2 | .. | 2 |
| TOTAL . . | 23 | 17 | 41† |

*Old : Weavers with experience of weaving with handspun yarn.
**New : Weavers with no such previous experience.
† Inclusive of one weaver, of whom no information is available.

29. Analysis of the weavers by the type of looms used by them shows (Table 9) that of the 41 weavers about 70:7 per cent. had flyshuttle looms and 22 per cent. worked on throw-shuttle looms. Information regarding the type of looms used by the rest is not available. Of the 29 weavers shown as working on the fly-shuttle looms one weaver in Maharashtra worked on a semi-automatic loom. Regionwise analysis of the type of looms shows that except in Bihar, the weavers in all the other regions, which have sent in reports, worked with fly-shuttle looms. Of the 19 weavers in Bihar, only 10 had fly-shuttle looms, and 8 had throw-shuttle looms and no information is available for the other weaver.

## TABLE 9

### *Looms*

| Region | No. of fly-shuttle looms | No. of throw-shuttle looms | No. of looms not specified | Total No. of looms |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 1. Andhra . . . . . | 4 | .. | .. | 4 |
| 2. Karnatak . . . . . | 3 |  | 2 | 5 |
| 3. Maharashtra* . . . . . | 7 | .. | .. | 7 |
| 4. Gujerat . . . . . | 1 | .. | .. | 1 |
| 5. Tamilnad . . . . . | 3 | .. | .. | 3 |
| 6. Bihar . . . . . . | 10 | 8 | 1 | 19 |
| 7. Saurashtra . . . . . | 1 | 1 | .. | 2 |
| TOTAL . | 29 | 9 | 3 | 41 |

*Includes one semi-automatic loom.

### *Yarn counts and Texture of cloth*

30. The comparative productivity data presented below relate to cloth woven from Ambar and mill yarn in the count range of 12's to 24's. The bulk of them was, however, cloth woven from 16's to 20's. The texture of the cloth in all areas, except Saurashtra, which has not supplied the details, was good, ranging from 40 to 48 ends per inch with 42 to 58 picks per inch. Consequently, the productivity analysis presented below may be considered a reliable index of the probable productivity of the average handloom weaver with Ambar yarn.

### *Comparative Productivity*

31. The comparative data on the productivity of weavers with Ambar and mill yarns, set out in Statement III and summarised in Table 10 below, show that the productivity of the weavers weaving the first piece of cloth with Ambar yarn does not compare unfavourably with their productivity with mill yarn. As can be seen from the frequency distribution in Table 10, of the 41 weavers on Ambar yarn for whom data are available, 38 or 93 per cent. had a productivity rate of 6 yards and above per day of 8 hours. Among them, 12 or 29 per cent. had a productivity rate of 8 yards and above per day of 8 hours and 16 had a productivity rate of 12 yards and above per day of 8 hours. Of the 28 weavers on mill yarn for whom comparative data are available, all had a productivity rate of 6 yards and above per day of 8 hours, 14 or 50 per cent. of them having a productivity rate of 8 yards and above, and 11 or 39 per cent. having a productivity rate of 12 yards and above per day of 8 hours.

TABLE 10

*Frequently Distribution*

| | Ambar yarn | | | | | Mill yarn | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Below 6 yds | 6 to 7 yds | 8 to 11 yds | 12 yards & above | Total | Below 6 yds | 6 to 7 yds | 8 to 11 yds | 12 yds. & above | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1. Andhra . . | .. | 1 | 2 | 1 | 4 | .. | .. | 1 | 2 | 3 |
| 2. Karnatak . . | 2 | 2 | 1 | .. | 5 | .. | 2 | 2 | 1 | 5 |
| 3. Maharashtra . | .. | 4 | 3 | .. | 7 | .. | 1 | 6 | .. | 7 |
| 4. Gujerat . . | .. | .. | .. | 1 | 1 | .. | .. | .. | 1 | 1 |
| 5. Tamilnad . | .. | 1 | 1 | 1 | 3 | .. | .. | .. | 2 | 2 |
| 6. Bihar . . | 1 | 1 | 4 | 13 | 19 | .. | .. | 5 | 5 | 10 |
| 7. Saurashtra . | .. | 1 | 1 | .. | 2 | .. | .. | .. | .. | .. |
| TOTAL . | 3 | 10 | 12 | 16 | 41 | .. | 3 | 14 | 11 | 28 |
| Percentage to the respectives totals | 7·3 | 24·4 | 29·3 | 39·0 | .. | .. | 10·7 | 50·0 | 39·3 | .. |

32. The details set out in Statement III show that for the first piece with Ambar yarn the productivity of weavers with Ambar yarn varies from about 2·4 yards per hour or 19·2 yards per day of 8 hours to 0·3 yards per hour or 2·4 yards per day of 8 hours, as against the variations in their productivity with mill yarn for comparable cloth between 2·5 yards per hour or 20 yards per day of 8 hours and 0·8 yards per hour or 6·4 yards per day of 8 hours. While the difference in the maximum and the minimum productivity rates attained by weavers with Ambar and mill yarn appears large, over the entire number of weavers covered by the report, the difference in the productivity of the average weaver in weaving the first piece of cloth with Ambar yarn is, on an average, 0·25 yards less per hour than the productivity of the average weaver with mill yarn.

33. The comparative study of the productivity figures for the second piece of cloth woven with Ambar yarn (Statement III) shows a sufficiently large improvement in the output per hour over that for the first piece to narrow the difference in the rates of output per hour with Ambar and mill yarn to negligible proportions. In other words, though the data available is limited, they serve to bring out clearly that, with experience of weaving with Ambar yarn, the rate of output per hour is likely to improve and equal that with mill yarn.

34. A fact of some significance to the weaving qualities of Ambar yarn is the uniformly high productivity rate of the weavers on the throw-shuttle looms in Bihar. The excellence of their performance with Ambar yarn on the throw-shuttle looms is seen to advantage when it is remembered that this work was done during the month of *Ramzan* when all of them were fasting. Although their experience with handspun yarn may have contributed to their higher output, the uniformly high productivity of about 12 yards and more per day of 7 out of the 8 weavers on throw-shuttle looms reflects favourably on the quality of the Ambar yarn.

35. In this connection, the experience of the persons in charge of the collection of comparative weaving data is that, as a class, weavers new to the use of handspun yarn take relatively more time both for the earlier and weaving processes. With experience of weaving two and more pieces, their productivity per hour improves sizeably. Even the limited data on the second piece woven with Ambar yarn clearly brings out the progressive improvement in weaving.

### *Weavers' opinion*

36. The written evidence of individual handloom weavers and also handloom weavers who are members of co-operative societies in all the regions covered by the report presented in the paragraphs above is that: (i) the Ambar yarn is good and comparable in most respects with mill yarn now available to them; (ii) the defects in the Ambar yarn supplied to them were capable of easy correction, as the yarn was the output of only spinner-trainees and not of fully qualified spinners; (iii) the output per day and the quality of the output can both be made comparable in every respect with those with mill yarn, given the necessary time for adjustment; and (iv)

they will welcome assured supplies of Ambar yarn provided sale of the output can be assured

*Conclusions*

37. By and large, productivity of old and new weavers on the fly-shuttle and throw-shuttle looms with Ambar yarn is satisfactory as the majority of them are able to weave 6 yards and more per day even with the first piece of Ambar cloth.

The available data as well as the evidence of persons in charge of the collection of data show that with further experience of weaving with Ambar yarn, their productivity may show substantial increases.

The relatively longer time taken by new weavers in the processes preceding weaving is, according to the evidence of field investigators, due wholly to their inexperience and not to any defect or peculiarity of the Ambar yarn.

Further experience of weaving with Ambar yarn, avaliable data show, may altogehter eliminate the small disparity in the present productivity rates between Ambar and Mill yarn.

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# STATEMENT III

## COMPARATIVE WEAVNIG DATA.

| | | | AMBAR YARN | | | | | | | | | | | | MILL YARN | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | First Piece | | | | | | Second Piece | | | | | | | | | | | |
| Name of weaver | Type of loom* | Class of weaver† | Count | Texture | | Length & Width Yds. In. | Wear-ing time Hrs. Min. | Rate per hr. (Yds) | Count | Texture | | Length & Width Yds. Inch | Weaving time Hrs. Min. | Rate per hr. (Yds) | Count | Texture | | Length & Width Yds. Inch | Weaving time Min. Hrs. | Rate per hr. (Yds.) |
| | | | | En-ds per inch | Pic-ks per inch | | | | | Ends per inch | Picks per inch | | | | | Ends per inch | Picks per inch | | | |
| 1 | 2 | 3 | 4 | 5 | | 6 | 7 | 8 | 9 | 10 | | 11 | 12 | 13 | 14 | 15 | | 16 | 17 | 18 |
| *Andhra* : | | | | | | | | | | | | | | | | | | | | |
| 1. L. Narayan, Yadki | F.S. | Old | 20 | 48 | 46 | 15×44 | 17—00 | 1.5 | 20 | 48 | 48 | 15×44 | 16—15 | 1·7 | 20 | 48 | 46 | 15×44 | 16—30 | 1·7 |
| 2. Rishingappa, Yadki | F.S. | Old | 24 | 48 | 58 | 16×44 | 24—15 | 0.75 | ... | ... | | ... | ... | ... | 20 | 48 | 46 | 16×44 | 22—30 | 1.0 |
| 3. Nagappa, Yadki | F.S. | Old | 20 | 44 | 54 | 16×46 | 20—30 | 1.25 | ... | ... | | ... | ... | ... | 20 | 44 | 50 | 16×46 | 19—20 | 1.5 |
| 4. Ghantappa, Yadki | F.S. | Old | 20 | 46 | 48 | 15¾×45 | 22—30 | 1·1 | 20 | 46 | 46 | 15×45 | 20—00 | 1·5 | ... | ... | | ... | ... | ... |
| *Karnatak* : | | | | | | | | | | | | | | | | | | | | |
| 5. R. Kalsad, Hubli | F.S. | New | 20 | 48 | 44 | 12½×32 | 12—10 | 1·00 | ... | ... | | ... | ... | ... | 20 | 48 | 47 | 12½×32 | 8—00 | 1.5 |
| 6. Smt. Mallamma, Hubli | F.S. | Old | 20 | 48 | 39 | 4×32 | 16—05 | 0·8 | ... | ... | | ... | ... | ... | 20 | 48 | 48 | 14×32 | 11—05 | 1.3 |
| 7. Sankarappa, Gurlhosur | ... | Old | 18 | 45 | 44 | 12×32 | 14—00 | 0.8 | ... | ... | | ... | ... | ... | 21 | 48 | 44 | 12×32 | 12—00 | 1.0 |
| 8. Thimayya, Anekal | F.S. | New | 20 | 44 | 41 | 11×46 | 29—20 | 0·3 | 20 | 44 | 44 | 8½×46 | 20—30 | 0·4 | 20 | 44 | 41 | 11×46 | 12—00 | 0.9 |
| 9. Venkatachalayya, Anekal | N.A. | ... | 20 | 44 | 44 | 8½×46 | 20—30 | 0.4 | ... | ... | | ... | ... | ... | 20 | 44 | 44 | 8½×46 | 10—40 | 0.8 |
| *Maharashtra* : | | | | | | | | | | | | | | | | | | | | |
| 10. S. V. Kerur, Mandarji | F.S. | New | 16 | 40 | 34 | 8×45 | 12—20 | 0.7 | 16 | 40 | 36 | 8×45 | 11—30 | 0·7 | 16 | 46 | 50 | 18×45 | 6—00 | 1.3 |
| 11. V. R. Tambat, Mandarji | F.S. | Old | 18 | 40 | 34 | 8×45 | 10—20 | 0.75 | ... | ... | | ... | ... | ... | 18 | 46 | 34 | 8×45 | 10—35 | 0.75 |
| 12. S. V. Gaikwad, Nasik | F.S. | New | 20 | 44 | 46 | 9×48 | 9—00 | 1·0 | 20 | 44 | 46 | 9×48 | 8—30 | 1·1 | 20 | 44 | 46 | 9×48 | 8—00 | 1.1 |
| 13. K. R. Pingte, Nandurgi | S.A. | New | 16 | 40 | 40 | 11½×30 | 13—30 | 0.8 | 16 | 40 | 42 | 11½×30 | 13—00 | 0·9 | 16 | 40 | 40 | 11½×30 | 10—00 | 1.2 |
| 14. Sankar Potle, Satara | F.S. | New | 22 | 40 | 42 | 9×49 | 9—30 | 1.0 | 22 | 42 | 44 | 9×49 | 8—30 | 1·1 | 22 | 40 | 42 | 9×49 | 8—00 | 1.1 |
| 15. V. G. Nagpure, Yeole | F.S. | New | 20 | 40 | 42 | 9×48 | 9—30 | 1.0 | ... | ... | | ... | ... | ... | 20 | 40 | 46 | 9×48 | 8—00 | 1.1 |
| 16. N. G. Korhalkar, Sinnar | F.S. | New | 22 | 48 | 46 | 8½×49 | 9—30 | 0.9 | ... | ... | | ... | ... | ... | 22 | 48 | 48 | 8½×49 | 8—30 | 1.0 |

*F.S.—Fly shuttle.
T.S.—Throw shuttle.
S.A.—Semi-automatic.
N.A.—Not available.

†Old—Weaver who has previously woven cloth with handspun yarn.
New—Weaver who has no such experience.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Gujerat* : | | | | | | | | | | | | | | | | | |
| 17. B. Haribhai, Vakam | F.S. | Old | 18 | ... 48 | 5×36 | 2—15 | 2.4 | ... | ... | ... | ... | ... | 18 | ... | 5×36 | 2—00 | 2.5 |
| *Tamilnad* : | | | | | | | | | | | | | | | | | |
| 18. Murugesh, Tirurur | F.S. | Old | 20 | 24 25 | 12×47 | 10—45 | 1.5 | ... | ... | ... | ... | ... | 20 | 24 22 | 12×46 | 7—05 | 1.9 |
| 19. Ramaswami, Tirurur | F.S. | New | 20 | 25 24 | 12×50 | 15—00 | 0.8 | ... | ... | ... | ... | ... | 20 | 20 23 | 12×50 | 9—35 | 1.5 |
| 20. Seeniappan, Tirurur | F.S. | Old | 20 | 24 24 | 12×46 | 11—00 | 1.1 | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... |
| *Bihar* : | | | | | | | | | | | | | | | | | |
| 21. Muslim Momin, Hazipur | F.S. | Old | 16 | 46 44 | 12×36 | 12—23 | 1.0 | 16 | 46 44 | 12×36 | 11—50 | 1.1 | 16 | 46 44 | 12×36 | 9—55 | 1.3 |
| 22. Tilaktanti, Bihar Sharif | F.S. | New | 16 | 40 40 | 12½×36 | 18—00 | 0.7 | .. | ... | ... | ... | ... | 20 | 40 44 | 12½×33 | 12—00 | 1.0 |
| 23. Morhin, Madhepur | F.S. | Old | 16 | 44 44 | 12×37 | 8—00 | 1.5 | 16 | 44 44 | 12×37 | 8—00 | 1.5 | ... | ... | ... | ... | ... |
| 24. N. Momin, Madhepur | F.S. | New | 16 | 44 44 | 8×46 | 7—00 | 1.1 | 16 | 44 44 | 8×46 | 7—00 | 1.1 | 16 | 44 44 | 8×46 | 6—00 | 1.3 |
| 25. Yaqub, Kapasia | F.S. | New | 16 | 42 42 | 12×37 | 13—00 | 1.0 | 16 | 42 42 | 12×37 | 11—00 | 1.1 | 16 | 42 42 | 12×37 | 10—00 | 1.2 |
| 26. Salim, Kapasia | F.S. | Old | 16 | 42 42 | 12×37 | 12—00 | 1.0 | 16 | 42 42 | 12×37 | 11—00 | 1.0 | ... | ... | ... | ... | ... |
| 27. Iliyas Mian, Shahpur | T.S. | Old | 16 | 44 44 | 12×34 | 7—30 | 1.7 | 16 | 44 44 | 12×34 | 7—15 | 1.7 | ... | ... | ... | ... | ... |
| 28. Suleman Mi n, Shahpur | T.S. | New | 16 | 44 44 | 12×34 | 7—40 | 1.5 | ... | ... | ... | ... | ... | 16 | 44 44 | 12×34 | 8—00 | 1.5 |
| 29. Santar Memin, Koilakh | T.S. | Old | 16 | 44 44 | 12×36 | 7—30 | 1.5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 30. Ahid Mian, Koilakh | T.S. | New | 16 | 44 44 | 12×36 | 7—40 | 1.5 | ... | ... | ... | ... | ... | 16 | 44 44 | 12×36 | 7—30 | 1.6 |
| 31. M. Yunus, Mohamadpur | T.S. | New | 16 | 44 42 | 8×46 | 13—00 | 0.6 | ... | ... | ... | ... | ... | 16 | 44 42 | 8×46 | 8—00 | 1.0 |
| 32. Abdul Rauf, Mohamadpur | T.S. | Old | 16 | 44 44 | 12×33 | 8—00 | 1.5 | 16 | 44 44 | 12×33 | 8—00 | 1.5 | ... | ... | ... | ... | ... |
| 33. Kansu Jamma, Mohamadpur | T.S. | Old | 16 | 44 44 | 12×33 | 6—00 | 2.0 | 16 | 44 44 | 12×33 | 6—00 | 2.0 | ... | ... | ... | ... | ... |
| 34. M. Fazal, Mohamadpur | T.S. | Old | 16 | 44 42 | 12×33 | 8—00 | 1.5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 35. Ashim Ali, Poosa Road | F.S. | Old | 16 | 44 42 | 12×38 | 5—30 | 2.0 | .. | ... | ... | ... | .. | ... | ... | ... | ... | ... |
| 36. Kashim Ali, Poosa Rd. | N.A. | Old | 16 | 44 44 | 12×33 | 6—00 | 2.0 | ... | ... | ... | ... | ... | 16 | 32 32 | 12×27 | 5—00 | 2.4 |
| 37. Kashim Ali, Simri | F.S. | New | 20 | 48 48 | 12×37 | 8—00 | 1.5 | ... | ... | ... | ... | ... | 20 | 48 48 | 12×37 | 7—00 | 1.7 |
| 38. Kashim Ali, Simri | F.S. | New | 20 | 48 48 | 12×37 | 7—00 | 1.7 | ... | ... | ... | ... | ... | 20 | 48 48 | 12×37 | 6—30 | 1.8 |
| 39. Hashim, Simri | F.S. | Old | 20 | 40 44 | 12×37 | 7—00 | 1.7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| *Saurashtra* : | | | | | | | | | | | | | | | | | |
| 40. Hira Dhana, Shahpur | T.S. | Old | 12 to 14 | ... | 10×40 | 13—00 | 0.8 | 12 to 14 | ... | 10×40 | 12—29 | 0.8 | ... | ... | ... | ... | ... |
| 41. Banaji Alji, Rajkot | F.S. | Old | 14 | ... | 22½×36 | 20—20 | 1.1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

# APPENDIX VIII

## Notes on inspections made by the Committee

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## APPENDIX VIII

## NOTES ON INSPECTIONS MADE BY THE COMMITTEE.

On 10th March 1956, the Committee visited the Ahmedabad Textile Industries Research Association in order to see Ambar Charkha experiments that were in the process of being conducted and to hold discussions with the Director and other officers connected with the experiments. An exhibition showing the evolution of the Ambar Charkha from its beginning by Shri Ekambaranathan in the year 1949 to the improvements that have been recently effected by A.T.I.R.A., was also arranged.

2. The discussion was opened by the Chairman with the suggestion that it would be useful for the Committee to visit an actual work centre of *'Parishramalaya'* under the pilot project of the Khadi Board, if one is situated near about Ahmedabad. It was decided that the *Parishramalaya* at Nadiad about 40 miles from Ahmedabad should be visited, the following morning.

3. The Chairman then invited Dr. Vikram Sarabhai, Director of A.T.I.R.A. to give his comments on the experiments and the findings that had so far been forthcoming. Dr. Sarabhai at the outset, struck a note of caution against a possible tendency to extra-polate the results of the experiments, carried out in his laboratory, to the general situation. He explained that their experiments could at best indicate what the Ambar Charkha, as an instrument of production, was capable of. In the background of the fact, however, that the experiments were limited only to five spinners with their Ambar Charkha sets and one weaving loom, over the short period of about a fortnight of actual work, it would be unwise to conclude that the results could be considered as of general applicability *vis-a-vis* large-scale production of yarn on the Ambar Charkha. Differing conditions, the human factor and an element of motivation would necessarily influence the output over a larger field. He informed the Committee that care had been taken to produce conditions in the laboratory as close as possible to conditions in the field. A shed somewhat on the lines of a village-hut had been constructed outside the main building of the Institute, having none of the facilities like air-conditioning etc. that were available in the main Institute.

4. Dr. Sarabhai also gave an account of the manner in which the design of the experiments at his Institute had been framed. He informed the Committee that the experiments had been conducted at the instance of the Government of India and in consultation with the Ambar Samiti of the Sarva Seva Sangh. Referring to the questionnaire that had been issued by the Committee, he stated that it covered much more than what A.T.I.R.A. had set out to do. He admitted that the questions were relevant to the problem, but due to the limited scope of the experiments carried out in his laboratories, they were not in a position to answer all of them.

5. One of the Members asked Dr. Sarabhai whether it would be possible for his Institute to extend the scope of the experiments in a manner which would enable him to include investigations covering all the aspects mentioned in the questionnaire. He was also requested to inform the Committee whether it would be possible for his Institute to continue experimentation, in regard to further improving the Ambar Charkha set, as an instrument of production. Dr. Sarabhai stated that his Institute is certainly capable of taking on both types of investigations; but whether this could be done is a matter for Government to settle with the authorities of A.T.I.R.A.

6. In conclusion, Dr. Sarabhai emphasised the necessity of instituting technological research on the Ambar Charkha, together with investigations on the related problems of training, organisation and economics, on an intensive basis.

7. Shri Shankarlal Banker, a close associate of Mahatma Gandhi and a worker of long standing under the All India Spinners' association, who was invited at the instance of Shri Vasavada, was then requested by the Chairman to give the benefit of his advice to the Committee. Shri Banker said that while he was all for scientific research and technological improvement, he would like to impress upon the Committee that further research and investigation on the Ambar Charkha should not hold up the programme for manufacturing khadi on the Ambar Charkha which had already been proved superior to the traditional charkha. He drew the attention of the Committee to the necessity of keeping the practical requirements of the situation and the objective that has to be achieved well in mind. The objective being, to improve the lot of the villagers, it was imperative that the latter should be given the Ambar Charkha which would enable them to increase their production and decrease the cost of yarn, simultaneously. Technological research should continue; but it should not stand in the way of accepting the Khadi Board's proposal for the subsidized distribution of Ambar Charkhas, on a large scale, to khadi producers in the villages. He also stated that while construction and public works could afford temporary relief, in his view, taking everything into account, decentralised spinning and weaving were best suited to relieve unemployment and underemployment in the rural areas. No time, he said, should be lost in arranging for large scale distribution of Ambar Charkhas to the village folk.

8. The Committee then visited the exhibition and watched the experiments on the Ambar Charkha that were being conducted in the A.T.I.R.A. laboratories.

9 On 11*th April,* 1956, the Committee visited the following institutions:

(1) The Khadi Board's *Parishramalaya* at Nadiad.
(2) The Ambar *Vidyalaya,* Sabarmati *Ashram.*
(3) *Saranjam* Karyalaya of the Sarva Seva Sangh in Sabarmati *Ashram.*

The Committee saw samples of yarn produced at Nadiad and in the Ambar *Vidyalaya* inspected some pieces of cloth woven out of this yarn and examined some charts and statements prepared at the two places, on the work that had been done. The general impression of the Committee was that the data had not been compiled satisfactorily and in fact as a result of this experience, the Committee decided at its meeting in Bombay on 12th April, 1956 that a proforma should be drawn up to suit the Committee's requirements and if necessary, a member of the Committee's staff should be sent personally to tabulate the information in the new proforma, from the preliminary data that might be furnished by the centres.

10. On 12th April 1956, the Committee interviewed Shri Kanitkar and Shri Sathe. Shri Kanitkar handed over a written statement to the Committee and Shri Sathe was also requested to send a statement incorporating his views. The Committee also watched demonstration of Shri Sathe's Ram *Charkha*. The Committee also saw the demonstration of Charkha known as the Sundar *Charkha* devised by Shri Parshotamdas.

11. On the afternoon of the 12*th April*, 1956, the Committee visited the laboratories of the Central Cotton Committee, Matunga, and discussed the Ambar Charkha experiments that had been conducted, with the Director, Dr. Nanjundayya. As a result of the discussion, the following facts emerged:

(1) that the experiments were designed in consultation with the Textile Commissioner and representatives of the Khadi Board but that no Ambar Charkha expert was associated;

(2) that the important variables in regard to output were:
  (a) climatic conditions;
  (b) the type of cotton used;
  (c) the condition of the workers;
  (d) the instrument itself;

(3) that the worker Shri Gaurhari Das could be considered as a standard worker having almost missionary zeal;

(4) that change in the count of yarn is not a significant factor for determining output, except when the count is above 40's;

(5) that for the major portion of the time when the experiments were conducted, only a single spinner was used as a subject. This led some of the members of the Committee to doubt the general applicability of the results achieved at Matunga.

In answer to a question whether the Matunga laboratory could undertake experiments for improving the Ambar Charkha as an instrument of production and whether they could conduct a new series of tests on the new model of the Ambar Charkha, the Director assured the Committee that he would be prepared to conduct the necessary investigations. The Director was requested that at the time of designing the next set of experiments, consultations with the Khadi Board and the Ambar Samiti should be ensured.

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12. The Ambar Charkha Committee assembled in Kasturba Seva Mandir, Rajpura (PEPSU) on the 1st May 1956. The Secretary of the Mandir Bibi Amtus Salam, an associate of Mahatma Gandhi, showed the Committee round the various Departments of the Mandir. Dr. Gopichand Bhargava, President of the Punjab Khadi Udyog Sangh and Shri Paramjit Singh, Director of Industries, PEPSU accompanied the Committee on the rounds. In the *Parishramalaya,* the Committee collected some samples of yarn spun by workers who had plied the Ambar Charkhas for a period of two months and over and also collected certain statistics relating to output of workers. The Committee observed that socks were being knitted from Ambar yarn on knitting machines made in Ludhiana. The Director of Industries PEPSU was requested to send a report on the knitability and weavability of Ambar yarn. The Committee also saw the Karalaya started recently in the Mandir for the manufacture of Ambar Charkha sets. Some iron parts such as gear wheels etc. were made locally.

13. During the course of discussions held, the following points emerged:

(i) that the Ambar Charkha had been well received by the workers and they were keen to have the particular set which each of them had plied for a certain length of time. Bibi Amtus Salam explained that the workers were even ready to acquire the set for full price (about Rs. 100-130) on deferred payment basis—payment to be made in kind not in cash. In other words, the workers would pay purchase price of the sets in instalments in the shape of hanks of yarn per day. It was felt that it was a welcome sign that the workers had realised the desirability of standing on their own legs. Having regard to psychological considerations, a worker is likely to make better use of a tool for which he has paid full price either in cash or in labour than of a tool which has been supplied to him either free of charge or on subsidized basis. Bibiji was requested to reduce her proposition to writing for the consideration of the Committee and Government.

(ii) that the villagers had realised that the Ambar Charkha was a tool which, if widely used, would enable villagers to attain self-sufficiency in cloth and solve the problem of unemployment and under-employment to an appreciable extent. The village Panchayats were prepared to use their authority and influence to ensure that local needs of cloth were met by local production and that the entry of any other cloth was banned.

The Social Welfare Officer, PEPSU informed the Committee that adequate provision had been made for the introduction of Ambar Charkhas in the schemes drawn up by the State.

14. On the afternoon, the Committee visited the *Parishramalaya* in Ambala. The *Parishramalaya* had been started recently and no worker had worked for a period of two months or over. The Committee collected certain statistics relating to the output of the workers.

15. On 2nd May 1956, the Committee visited Adampur, the headquarters of the Punjab Khadi Udyog Sangh. The Committee were shown round the various departments by Dr. Gopichand Bhargava and Shri Hariram Chopra, President and Secretary of the Sangh respectively. There was no *Parishramalaya* in Adampur. There is a Karalaya for the manufacture of Charkha sets and it was reported that 2,500 traditional charkhas were being manufactured per month. Manufacture of Ambar Charkhas had also been taken up.

16. The Committee then visited the *Parishramalaya* in Nur Mahal at a distance of about 30 miles from Adampur. The Committee collected certain samples of the yarn spun by workers who had worked for a period of two months and over, and certain statistical data regarding output. A deputation of the local Panchayat saw the Committee and urged that the *Parishramalaya* should be continued in Nur Mahal as the role of the Ambar Charkha in the economy of the village had been fully realised. An instance was cited to the effect that a widow mother died leaving three daughters unprovided for. The daughters took to spinning on the ordinary charkha, acquired high proficiency and earned sufficient to maintain themselves and to defray the expenses on the marriage of two of them. One of the ladies in the village had placed premises at the disposal of the village free of rent for running a *Parishramalaya*. Shri Purshottam Kanji gave a suitable reply on behalf of the Committee.

17. In the afternoon, the Committee visited the *Parishramalaya* in Bilga, at a distance of about five miles from Nur Mahal. The Committee saw the *Parishramalaya* and collected certain samples of yarn and statistics relating to the output of workers. A deputation of the Congress workers and the local Panchayat saw the Committee and explained that the village of Bilga had played a prominent role in the freedom movement and during the short period the *Parishramalaya* had been in existence, the villagers realised the potentialities of the Ambar Charkha. The deputationists, therefore, urged that the Committee should sanction the continuance of the Ambar programme. Once again Shri Purshottam Kanji gave a reply in suitable terms on behalf of the Committee.

### *Fourth Session of the Ambar Charkha Committee in South India on 7th May* 1956 *and 8th May* 1956

*Tirupur* (Madras State).

18. The Committee visited the Ambar Charkha *Vidyalaya* at Veerpandi and also the following *Parishramalayas*:—

(i) Veerpandi *Parishramalaya;*

(ii) Velampalayam *Parishramalaya;*

(iii) Rattai Kainar *Parishramalaya;*

(iv) Kashilingam Palayam *Parishramalaya.*

The main details of information gathered by the Committee at the above institutions are given below:

### I. *Vidyalaya at Veerpandi*

| | |
|---|---|
| (*a*) number of trainees | 65 |
| (*b*) age group | between 16 and 47 |
| (*c*) men | all |
| (*d*) Women | nil |
| (*e*) trainees from weavers' families | 4 |

In this *Vidyalaya*, the Dhunai *Modia* was not used. Cotton was opened with the traditional bow. One of the facts which the Committee particularly noticed was that many children under the age of 10 were working on the opening of cotton. The undesirability of this was brought to the notice of the authorities of. the *Vidayalaya.*

Another interesting point which was observed by the Committee was that one of the trainees operated two Ambar Charkhas simultaneously. Statistics regarding production etc. by plying two charkhas at the same time were, however, not available; since no separate record was maintained for training in the Ambar Charkha which was only one of the many subjects in the *Vidyalaya.*

### II. *Veerpandi Parishramalaya.*

| | |
|---|---|
| (*a*) number of trainees | 28 |
| (*b*) age group | 15 to 30 |
| (*c*) number from weavers' families | 2 |
| (*d*) men | nil |
| (*e*) women | all |

One interesting feature of the *Parishramalaya* at Veerpandi was its weaving section. The weavers, one a traditional handloom weaver and the other, a traditional khadi weaver, were engaged in the weaving of cloth with Ambar yarn.

*First weaver*: (traditional handloom weaver)—had been working with ambar yarn for the last 2 months, and had had previous experience of two or three years of weaving with mill yarn. As against an out-put (weaving only) of 2 yards per hour with mill yarn, this weaver was able to produce only 1¾ yards of cloth per hour with Ambar yarn. According to him, the reason for reduced output was due to more knots and therefore more breakages in Ambar yarn. He also reported that for warping, sizing and drawing, both mill yarn and Ambar yarn required the same amount of time.

*Second weaver*: (traditional khadi weaver). He had four years experience in weaving cloth out of traditional khadi yarn and had been working for about two months on weaving with Ambar yarn. As against an out-put of one yard per hour with traditional khadi yarn, he was able to do two yards per hour with Ambar yarn; but for an 8-hour day his average output was 12 yards. According to him, Ambar yarn was much more uniform and superior in every way to traditional khadi yarn.

### III. *Velampalayam Parishramalaya.*

| | |
|---|---|
| (*a*) Number of trainees | 36 |
| (*b*) age group | 10 to 47 |
| (*c*) men | nil |
| (*d*) women | all |
| (*e*) number from weavers' families | nil |
| (*f*) old spinners | 20 |
| (*g*) new spinners | 16 |

IV. *Parishramalaya at Rattai Kainar.*

| | |
|---|---|
| (*a*) Number of trainees | 14 |
| (*b*) age group | 13 to 35 |
| (*c*) men | nil |
| (*d*) women | 14 |
| (*e*) number from weavers' families | nil |
| (*f*) old spinners | nil |
| (*g*) new spinners | nil |

V. *Parishramalaya at Kashilingam Palyam.*

| | |
|---|---|
| (*a*) Number of trainees | 20 |
| (*b*) age group | 14 to 40 |
| (*c*) men | 6 |
| (*d*) women | 14 |
| (*e*) number from weavers' families | nil |
| (*f*) old spinners | all |
| (*g*) new spinners | nil |

Samples of yarn and production charts, written in the local languages were obtained from each of these *Parishramalayas.* According to a decision reached later in Puttur, the samples of yarn, together with samples of cloth procured at Narayanavanam in Puttur were handed over with a covering letter, to Shri S. R. Kaiwar, Director of Industries, Andhra, for being tested at the Madras Textile Institute, within a week.

19. *Puttur*—(Andhra State).

*Parishramalaya at Narayanavanam.*

| | |
|---|---|
| (*a*) number of trainees | 35 |
| (*b*) age group | 15 to 35 |
| (*c*) men | 4 |
| (*d*) women | 31 |
| (*e*) number from weavers' families | 25 |
| (*f*) old spinners | nil |
| (*g*) new spinners | 10 |

The village of Narayanavanam is pre-dominantly populated with handloom weavers. In Narayanavanam proper and within a radius of about 5 miles, the main occupation is handloom weaving. The number of weavers' families in Narayanavanam is 2,220, 602 of which have joined the co-operative fold. All these co-operative societies are affiliated to the Andhra State Weavers' Co-operative Society. The State Apex Society supplies yarn as an advance but free of cost, to the weavers. The cloth produced by the weavers is collected by the Society which undertakes its marketing. The State Weavers' Society has 150 sales depots attached to it. Most of these are within the State but a few are located outside the State in other important capitals. The weaver only gets his wages from Society. Wages are as follows:

| | |
|---|---|
| (*i*) for 20's | As. -/4/6 per knot of 10 hanks. |
| (*ii*) for 40's | As. -/7/- per knot. |
| (*iii*) for 60's | As. -/6/8 per knot. |

The State Society gets yarn direct from the mills for distribution to the handloom weavers. The rate of yarn is as follows:—

| | |
|---|---|
| (*i*) for 20's | Rs. 18/- per unit of 10 lbs. |
| (*ii*) for 40's | Rs. 26/8/- per unit of 10 lbs. |
| (*iii*) for 60's | Rs. 46/8/- per unit of 10 lbs. |

Only three families have so far taken to weaving with Ambar yarn and this also at the specific request of the Ambar Khadi centre in Narayanavanam. The Khadi centre has been able to draw away these three families, by the promise of slightly higher wages than they are paid, for weaving with mill yarn.

The above information was given to the Secretary of the Committee by the Deputy Registrar of Co-operatives, Puttur.

Out of the three handloom weavers who have agreed to weave with ambar yarn, the Committee visited two, for taking evidence.

*First weaver*:

According to his statement, he could weave the same yardage of cloth with Ambar yarn in 2 hours while he took only 1½ hours in the case of mill yarn. The reason for reduced output was more knots, more unevenness and more breakage.

*Second weaver*:

This weaver complained that due to more slubs and more breakages, his out-put in a given unit of time, with Ambar yarn, was three-fourths of the quantity which he could weave with mill yarn. This weaver also informed the Committee that the had taken to weaving with Ambar yarn because the local *Parishramalaya* had promised to give him an additional wage of Rs. 2-0-0 for every 24 yards of cloth woven.

## APPENDIX IX

**Results of weaving tests on yarn produced in the *Parishramalayas* under the Board's Pilot Project Scheme. These tests were conducted on the directive of the Committee.**

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# APPENDIX IX

## RESULTS OF WEAVING TESTS ON YARN PRODUCED IN THE PARISHRAMALAYAS UNDER THE BOARD'S PILOT PROJECT SCHEME. THESE TESTS WERE CONDUCTED ON THE DIRECTIVE OF THE COMMITTEE

## I

### SHRI S. R. VASAVADA'S REPORT ON WEAVING TESTS ON AMBAR YARN

| Handloom . . . | Count 20's | Width 45" | Length 12 yards First piece | Ends per inch 45 Second piece |
|---|---|---|---|---|
| Warp hanks . . | .. | .. | 33 | 33 |
| Weft hanks . . . | .. | .. | 36 | 34 |
| Time-warp preparing . | .. | .. | 5 hours | 5 hours |
| Piecing time . . | .. | .. | 5 hours | 4 hours |
| Beaming time . | .. | .. | 1 hour | 1/2 hour |
| Weaving time . | .. | .. | 13 hours | 10 hours |
| Average production per hour. | .. | .. | 1 yard | 1¼ yards |
| Ends breakages . | .. | .. | 40 | 28 |
| Ends per inch (Pick) . | .. | .. | 48 | 45 |

## II

### REPORT OF THE PRINCIPAL GOVERNMENT TEXTILE INSTITUTE, MADRAS ON THE TESTS CARRIED OUT ON AMBAR YARN AND CLOTH

The tabulated statement of test reports for four samples of Ambar Charkha yarn and two samples of Ambar Charkha cloth are given below:

*Yarn Samples*

| Name of the place and Centre | Lea-Breaking strength for six tests | Counts for six tests | Remarks |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| Narayanavaram under Puttur Centre. | 1. 31 lbs.<br>2. 32 lbs.<br>3. 34 lbs.<br>4. 50 lbs.<br>5. 49 lbs.<br>6. 42 lbs. | 23·5s<br>19·75s<br>18·25s<br>18·75s<br>18·25s<br>20·00s | |
| | 238 lbs. | 118·50 | |
| | 6<br>39·6 lbs. | 6<br>19·75 | |
| Veerapandi under Tirupur Centre. | 1. 27 lbs.<br>2. 50 lbs.<br>3. 36 lbs.<br>4. 45 lbs.<br>5. 43 lbs.<br>6. 40 lbs. | 20·5s<br>17·5s<br>19·0s<br>18·0s<br>18·75s<br>18·25s | |
| | 241 | 112·00 | |
| | 6<br>40·16 lbs. | 6<br>18·66s | |
| Kasilingham Palingam under Tirupur Centre. | 1. 34 lbs.<br>2. 35 lbs.<br>3. 42 lbs.<br>4. 36 lbs.<br>5. 34 lbs.<br>6. 59 lbs. | 20·5s<br>22·00s<br>19·5s<br>21·5s<br>21·75s<br>18·00s | |
| | 240 | 123·25 | |
| | 6<br>40 lbs. | 6<br>20·54s | |
| Velampalayam under Tirupur Centre. | 1. 62 lbs.<br>2. 55 lbs.<br>3. 54 lbs.<br>4. 51 lbs.<br>5. 22 lbs.<br>6. 21 lbs. | 18·75s<br>18·25s<br>17·25s<br>17·25s<br>26·00s<br>28·50s | |
| | 265 | 126·00 | |
| | 6<br>42·5 lbs. | 6<br>21s. | |

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*General remarks.*

The yarn is not even in thickness and the turns per inch is not uniform. Hence the difference in count and turns per inch and strength noticed.

## *Cloth Samples*

| *Un-bleached* | *Bleached* |
|---|---|
| 1. Length 3 yds. | 3 yds. |
| 2. Width 44¼" to 44½" | 40" to 40⅛" |
| 3. Ends per inch 50 | 54 |
| 4. Picks per inch 44 to 46 | 46 to 50 |
| 5. Plain Weave (Structure) | Plain weave (Structure) |

## *Breaking strength in warp and weft way*

(Strips taken 7" × 6 5/8")

| Warp way | Elongation | Weft Way | Elongation | |
|---|---|---|---|---|
| 1. 115 lbs | 1⅛" | 80 lbs. | 1 5/8" | (Un-bleached) |
| 2. 80 lbs. | ,, | 75 lbs. | ,, | ,, |
| 3. 100 lbs. | ,, | 80 lbs. | ,, | ,, |
| 4. 100 lbs. | ,, | 85 lbs. | ,, | ,, |
| 5. 90 lbs. | ,, | 95 lbs. | ,, | ,, |
| 6. 85 lbs. | ,, | 80 lbs. | ,, | ,, |
| 570 | | 495 | | |
| 6<br>95 lbs. | | 6<br>82·5 lbs. | | |
| 1. 50 lbs. | 1¼" | 50 lbs. | 1¼" | (Bleached) |
| 2. 45 lbs. | ,, | 45 lbs. | ,, | ,, |
| 3. 45 lbs. | ,, | 45 lbs. | ,, | ,, |
| 4. 45 lbs. | ,, | 45 lbs. | ,, | ,, |
| 5. 45 lbs. | ,, | 45 lbs. | ,, | ,, |
| 6. 70 lbs. | ,, | 55 lbs. | ,, | ,, |
| 255<br>6<br>42·5 lbs. | | 240<br>6<br>40 lbs. | | |

*17th May,* 1956

(Sd). VAIDYANATHAN,
Principal.

## III

## DIRECTOR OF INDUSTRIES P.E.P.S.U.

### *Test report of Ambar Yarn and Ambar Khadi prepared at the Kasturba Sewa Mandir, Rajpura.*

*Ambar Yarn*

*Count Yarn*

| | |
|---|---|
| Sample No. 1 | 11s. |
| No. 2 | 15½s. |
| No. 3 | 9½s. |
| No. 4 | 15s |
| No. 5 | 22·3s. |
| No. 6 | 16·s. |

*Ambar Khadi.*

*Cloth.*

| | |
|---|---|
| Breaking strength | 4″ width. |
| Sample I | 33·3 lbs. |
| Sample II | 24·3 lbs. |

*Count of cloth.*

| | |
|---|---|
| Sample No. 1 | 8·5 W.P.<br>13·2 W.F. |
| Sample No. 2 | 10·5 W.P.<br>9 W.F. |

### *A note on the weavability and knitability with Ambar Charkha Yarn*

In compliance with the directive of Khera Committee on its visit to Kasturba Sewa Mandir at Rajpura on 1st May, 1956, I was verbally ordered by the Director of Industries, Patiala to assess the weavability and knitability of Ambar Charkha yarn on fly-shuttle loom and hand-knitting machines at par with Mill spun yarn basis.

Accordingly I returned to Rajpura on 2nd May, 1956 and have since been attending to this work, which finished on 6th May 1956 night. There was lot of difficulty in persuading weavers to help in carrying out this interesting experiment. The traditional weaver is a no changer and besides this was just wrong season to expect him to come to us just for our experiment for 2 or 3 days leaving his hearth and home without good reason. Besides since there is no weaving workshop in this organisation and every bit of item had to be loaned from Government work centre which is at a distance. This also caused a good bit of obstruction in performance of this duty. Ultimately the authorities of Kasturba Sewa Mandir arranged two weavers of their own organisation who could work on hand spun yarn on Fly shuttle Handlooms. Since there was no hereditary weaver at hand to weave mill made yarn on fly shuttle handloom an ex-trainee of work Centre was put on the job.

In the case of Ambar Charkha yarn, two different experiments were carried out. In one case all the preparatory processes were done on the traditional primitive method, *i.e.* stretched warp system in the open, like-wise sizing and piecing the warp with the usual cotton thread healds, and use of kana reed, but the actual weaving was done on fly shuttle loom. This process stood the strain and it was possible to weave the normal quality of cloth.

In the second experiment, all the processes adopted were those normally followed by a fly shuttle handloom weaver *i.e.*, sizing on Hanks warping on usual drum warping machines etc.

This of course, did not succeed, and breakage of warp threads was extensive.

The fact of the matter is that the Ambar Charkha Yarn supplied for the purpose was the work of trainees and not of trained spinner workers. This could not be supplied, because those who are trained spinners are busy training a large number of fresh candidates and cannot be put under production of spinning yarn.

Thus the weavability experiment as carried on here was made under three handicaps.

(i) trainees defective yarn.

(ii) without proper workshop facilities.

(iii) mis-fit labour.

Accordingly it is suggested that the experiment may be repeated in a set up weaving workshop by pre-arrangement of the service of expert skilled labour for the purpose with the best possible yarn of Ambar Charkha spun by skilled workers, when a proper data could be again worked out.

### *Knitability*

In this case too, yarn failed in the first instance. Later a skilled spinner was exclusively put on spinning good yarn for the purpose and this succeeded very well, which shows that Ambar Charkha yarn has better potentiality properly spun by Expert spinners.

### EXPERIMENT No. 1

*Ambar Charkha Yarn test weaving on fly shuttle loom with primitive and preparatory processes.*

| S. No. 1 | Name of Process or Specifications 2 | Particulars 3 | Remarks 4 |
|---|---|---|---|
| 1. | Sizing | 7 Hours. | Note I. |
| 2. | Winding warp | | Wife of the weaver worked with him jointly. |
| 3. | Warping | | |
| 4. | Drawing and Beaming | 2 hours 40 mts. | When he commenced weaving she supplied the ready made pirns. |
| 5. | Fitting up warp on loom | One Hour | |
| 6. | Length of warp | 16 yds. | Note II. |
| 7. | Width of warp cloth | 30" | One yd. piece of cloth produced is enclosed. |
| 8. | Count of warp Yarn | 14 S | |
| 9. | Count of weft yarn | 14 S | |
| 10. | Reeds or no. of ends per inch. | 42 | |
| 11. | Average No. of picks | 41/42. | |
| 12. | Production per 8 hours | 10 yds. | |

Experiment No. 1—(contd.)

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| 13. | Wages earned for Fabrication. | Rs. 1/9/- at -/2/6 per yd. | |
| 14. | Quality of cloth . . | Satisfactory. | |
| 15. | If bad selvedge give reasons | No problem. | |
| 16. | If defective cloth whether due to uneven or faulty yarn, uneven packing, faulty workmanship breakage of warp threads or any other fault. | No comment. | |
| 17. | Misc. information . . | In all weaving processes took 13½ hours to finish the warp and cloth produced was 15½ yds. | |

## EXPERIMENT No. 2

### *Ambar Charkha Yarn test weaving on fly shuttle loom with usual preparatory processes*

| S. No. | Name of process or specification | Particulars | Remarks |
|---|---|---|---|
| 1. | Sizing . . . . . | 4 hours . . | Weaver was assisted by another weaver who co-jointly worked with him except in weaving. |
| 2. | Winding warp . . . | At an average of 2½ hrs. (800 yds. per hour.) | He supplied him ready made pirns while the master weaver was weaving. |
| 3. | Warping . . . . | 1½ hours. | |
| 4. | Drawing and Beaming . | 7 hours. | |
| 5. | Fitting up warp on loom . | 2 hours. | |
| 6. | Length of warp . . | 20 yds. (issued 5 lbs. of yarn.) | One yard cloth is enclosed. |
| 7. | Width of warp cloth . | 30" | |
| 8. | Count of Warp yarn . | 14s. | |
| 9. | Count of weft yarn . . | 14s. | |
| 10. | Reeds or No. of ends per inch. | 40s Reed and about 40 ends in cloth per inch. | |
| 11. | Average No. of picks per inch . . . . | 32/34 | |
| 12. | Production per 8 hrs. . | 2½ yds. | |
| 13. | Wages earned for Fabrication | Nil value. | |
| 14. | Quality of cloth . · | Poor. | |
| 15. | If bad selvedge give reason | Extensive breakage of threads. | |
| 16. | If defective cloth whether due to uneven or faulty yarn, uneven packing, faulty workmanship breakage of warp threads or any other fault. | | |
| 17. | Misc. information. | | |

## EXPERIMENT No. 3

*Mill spun yarn weaving on fly shuttle loom with usual preparatory Processes.*

| S. No. | Name of Process or specification | Particulars | Remarks |
|---|---|---|---|
| 1. | Sizing . . . . | Preparing the warp for sizing 1½ hours. Sizing process 1 hour | Weaver was assisted by another helper worker for all processes except weaving. The helper supplied to him the ready made weft pirns for weaving, |
| 2. | Winding warp . . . | 5 hanks per hour | |
| 3. | Warping . . . . | 1-3/4 hours. | |
| 4. | Drawing and Beaming . | 7 hours. | |
| 5. | Fitting up warp on loom . | One hour. | |
| 6. | Length of warp . . | 20 yds. | |
| 7. | Width of warp cloth . | 30" | |
| 8. | Count of warp yarn . | 14s. | |
| 9. | Count of weft yarn . . | 14s. | |
| 10. | Reeds or No. of ends per inch. | 40s. | |
| 11. | Average No. of picks per inch. | 36/38 | One yard of cloth is sent herewith. |
| 12. | Production per 8 hours . | 14 yds (About) | |
| 13. | Wages earned for fabrication | Rs. 2/3/- at -/2/6 per yd. | |
| 14. | Quality of cloth . . | Satisfactory. | |
| 15. | If bad selvedge give reason | No problem. | |
| 16. | If defective cloth whether due to uneven or faulty yarn, uneven packing, faulty workmanship breakage of warp threads or any other fault. | No comments. | |
| 17. | Misc. information . | I. The worker was not a hereditary professional weaver but an Ex-trainee of work centre.<br>II. In all weaving process took 12 hours to finish the work and cloth produced was 19½ yds. | |

## IV

## REPORT OF THE JOINT DIRECTOR OF INDUSTRIES (COMMERCE) DIRECTORATE OF INDUSTRIES, U.P., KANPUR ON THE CLOTH WOVEN OUT OF AMBAR YARN SUPPLIED BY THE MINISTRY OF PRODUCTION, GOVERNMENT OF INDIA, NEW DELHI.

Ninety yards of cloth weighing 22 lbs. 7 oz. was got woven by 4 weavers of Etawah. The average weight per yd. comes to 4 oz. The wastage of 3 lbs. 2 oz. of yarn as claimed by the weavers was allowed. The necessary information regarding manufacturing particulars, specifications, wastage in soaking, winding, weaving and bleaching are shown in the enclosed statements.

I visited Etawah along with the Principal, Government Central Textile Institute, Kanpur. We talked with the weavers and the technical staff and our observations are as under:—

(i) the weavers have mentioned in their statements that high twist of yarn and unevenness caused difficulties in winding, warping, sizing and weaving and there were many breakages. If these defects are removed the yarn would behave better;

(ii) the yarn is more adaptable to warp sizing than hank sizing. There were also difficulties because of mid summer season and they thought that it would fare better in winter and rainy seasons;

(iii) two of the weavers who were not at all accustomed to hand-spun yarn and warp sizing felt greater difficulties;

(iv) Since the hanks of the yarn were of the size of hand-spun yarn, the weavers could easily recognize it as hand-spun yarn and, therefore, they somewhat exaggerated the difficulties. They also found it more uneven than mill yarn. On account of breakages and unevenness the output of cloth was less than in the case of mill yarn.

(Sd.) J. N. SINGH,
Principal,
Government Central Textile
Institute, Kanpur.

(Sd.) L. C. GUPTA,
Jt. Director of Industries,
(Commerce), U.P., Kanpur.

## *Statement showing receipt and consumption of yarn*

| Sl. No. | Particulars | Counts | Quantity | Total | Remarks |
|---|---|---|---|---|---|
| 1. | Total yarn received. | 24's<br>20's | 19 lbs.<br>13 lbs. 12 oz. | 32 lbs. 12 oz. | |
| 2. | Wastage of yarn in soaking. | | | 1 lb. 3 oz. | Average of wastage in soaking ½ oz. per lb. |
| 3. | Total net weight of yarn after soaking | 24's<br>20's | 18 lbs. 7 oz.<br>13 lbs. 2 oz. | 31 lbs. 9 oz. | |
| 4. | Yarn consumed in manufacturing. | 24's<br>20's | 9 lbs. 8 oz.<br>11 lbs. | 20 lbs. 8 oz. | |
| 5. | Wastage allowed | 24's<br>20's | 1 lb. 2 oz.<br>13 oz. | 1 lb. 15 oz. | |
| 6. | Yarn in hand | 24's<br>20's | 7 lbs. 10 oz.<br>1 lb. 8 oz. | 9 lbs. 2 oz. | |

## *Statement showing manufacturing particulars*

| Sl. No. 1 | Particulars 2 | Count of yarn used in warp. 3 | Count of yarn used in weft. 4 | Ends per inch in grey. 5 | Ends per inch after bleaching 6 | Picks per inch in grey 7 | Picks per inch after bleaching 8 | Remarks. 9 |
|---|---|---|---|---|---|---|---|---|
| 1. | Dhoti 5×45″ | 20's | 20's | 42 ends per inch | 46 ends per inch. | 42 picks per inch. | 46 picks per inch. | |
| 2. | Table cloth 45″×45″ | 24's | 24's | 42 ends per inch. | 44 ends per inch. | 44 picks per inch. | 45 picks per inch. | |
| 3. | Long cloth 30″ | 24/s | 20's | 56 ends per inch. | 60 ends per inch. | 64 picks per inch. | 68 picks per inch. | |
| 4. | Twill 30″ | 24's | 20's | 56 ends per inch. | 60 ends per inch. | 42 picks per inch. | 44 picks per inch. | |
| 5. | Bijali shirting 30″ | 24's | 24's | 52 ends per inch. | 56 ends per inch. | 52 picks per inch. | 56 picks per inch. | |
| 6. | Sheeting cloth 30″ | 24's | 20's | 54 ends per inch. | 56 ends per inch. | 56 picks per inch. | 60 picks per inch. | |
| 7. | Long cloth 36″ | 20's | 20's | 54 ends per inch. | 58 ends per inch. | 50 picks per inch. | 52 picks per inch. | |
| 8. | Gamcha 30″ | 24's | 24's | 54 ends per inch | 56 ends per inch. | 50 picks per inch. | 52 picks per inch. | |

## V

# TECHNOLOGICAL LABORATORY
# INDIAN CENTRAL COTTON COMMITTEE.

## YARN TEST REPORT No. 1617

### Samples of Ambar charkha yarns submitted by the Secretary, Ambar Charkha Committee, New Delhi.

| Laboratory Sample No. | Particulars of sample. |
|---|---|
| Y-3280 | Ambar Charkha Yarn No. 1 from Nur Mahal Parishramalaya (Punjab). |
| Y-3281 | ,, ,, ,, No. 2 from the Bilga Parishramalaya (Punjab). |
| Y-3282 | ,, ,, ,, No. 3 from Rajpura Parishramalaya (Pepsu). |
| Y-3283 | ,, ,, ,, No. 4 from the Narayanavanam, Puttur (Andhra State). |
| Y-3284 | ,, ,, ,, No. 5 from Veerpandi Parishramalaya, Tirupur (Madras State). |
| Y-3285 | ,, ,, ,, No. 6 from Kashilingam Palayam Parishramalaya in (Madras State). |

| Laboratory Sample No. | Y-3280 | Y-3281 | Y-3282 | Y-3283 | Y-3284 | Y-3285 |
|---|---|---|---|---|---|---|
| Lea Test Results :— | | | | | | |
| Counts of yarn | 16·4 | 15·7 | 15·6 | 19·1 | 17·7 | 19·0 |
| Co-efficient of variation of count (%) | 12·5 | 9·5 | 18·4 | 16·5 | 14·4 | 9·2 |
| Strength of Yarn in Lbs. . | 55·3 | 52·4 | 42·2 | 49·7 | 46·5 | 41·0 |
| Count strength product . . | 907 | 823 | 658 | 949 | 823 | 779 |

Tests were carried out at about 65% R. H. and 84F Temperature.

(Sd.) ILLEGIBLE,
for Director,
Technological Laboratory.

*Matunga, Bombay*-19, *the* 25*th May,* 1956.

# APPENDIX X

## Statistical data collected by the Committee's Secretariat in respect of the performance of 84 Parishramalys under the Khadi Board's Pilot Project Scheme.

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# APPENDIX X

## STATISTICAL DATA COLLECTED BY THE COMMITTEE'S SECRETARIAT IN RESPECT OF THE PERFORMANCE OF 84 PARISHRAMALAYAS UNDER THE BOARD'S PILOT PROJECT SCHEME.

**Name of Parishramalayas**—Metapalli, Dt. Karimnagar, (Hyderabad)

Date of starting 7th Jan. 1955
Number of Charkha sets 5

| S. No. | Name of Operative | Class of Spinner | | No. of days of attendance | Average count | From 28th March 56 to 13th April 1956. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Duration of Work (Hours) | | | | | |
| | | Age | Sex | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | Kahikola Chinnamma | 20 | F | 39 | 7 | 53 | 53 | 106 | 135 | 14 | 259 |
| 2 | Jogablıu Laxmidevi | 13 | F | 36 | 5 | 53 | 53 | 106 | 89 | 8 | 174 |
| 3 | Anasuyadevi | 16 | F | 28 | 5 | 39 | 39 | 78 | 53 | 10 | 136 |
| 4 | Prabhavathy devi | 12 | F | 39 | 4 | 53 | 53 | 106 | 61 | 8 | 141 |
| 5 | Mukhirala Ramabhai | 25 | F | 39 | 5 | 53 | 53 | 106 | 93 | 12 | 173 |
| 6 | Besta Rajubhai | 30 | F | 39 | 5 | 53 | 53 | 106 | 103 | 12 | 186 |
| 7 | Kotnu Rajamma | 25 | F | 37 | 4 | 46 | 46 | 92 | 67 | 11 | 133 |
| 8 | Premiladevi | 12 | F | 39 | 3 | 53 | 53 | 106 | 49 | 10 | 103 |
| 9 | Konduraju | 30 | F | 34 | 4 | 46 | 46 | 92 | 67 | 10 | 118 |
| 10 | Govardan Laxmi Raju | 45 | F | 35 | 3 | 53 | 53 | 106 | 79 | 10 | 119 |
| 11 | Gundunarsu | 55 | F | 36 | 3 | 46 | 46 | 92 | 40 | 10 | 89 |
| 12 | Anjamma | 25 | F | 31 | 3 | 46 | 46 | 92 | 50 | 10 | 92 |
| 13 | Katke Rajmma | 50 | F | 38 | 3 | 49 | 49 | 98 | 68 | 11 | 118 |
| 14 | Darmapuri Rajeswari | 20 | F | 34 | 3 | 49 | 49 | 98 | 64 | 9 | 113 |
| 15 | Katekola Chinniah | 12 | M | 37 | 5 | 49 | 49 | 98 | 111 | 13 | 190 |
| 16 | Pakrudin | 16 | M | 39 | 5 | 53 | 53 | 106 | 116 | 10 | 209 |
| 17 | Sheik Imam | 10 | M | 39 | 5 | 53 | 53 | 106 | 93 | 13 | 192 |
| 18 | Ramahpelli Rumayya | 20 | M | 39 | 5 | 53 | 53 | 106 | 115 | 10 | 193 |
| 19 | C. H. Hanumanulu | 18 | M | 33 | 5 | 42 | 42 | 84 | 100 | 12 | 159 |
| 20 | Kodur Iswarayya | 22 | M | 28 | 5 | 53 | 53 | 106 | 102 | 10 | 134 |
| 21 | Kachrala Maheswar | 22 | M | 34 | 5 | 53 | 53 | 106 | 95 | 10 | 151 |
| 22 | Abdul Karim | 25 | M | 27 | 6 | 49 | 49 | 98 | 110 | 10 | 150 |
| | Total | .. | | .. | .. | .. | .. | 2,194 | 1,850 | .. | .. |

Name of Parishramalaya : Narela (Delhi State).

| Serial No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 1956 to 27th March 1956 — Duration of work (Hours) — Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March 1956 to 13th April 1956 — Duration of work (Hours) — Card-ing | Spg. | Total | Prodn. hanks | Count | Los Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Arjun Singh | .. | 51 | 50 | 75 | 125 | 42 | 12 | 12 | 50 | 65 | 115 | 84 | 12 | 22 |
| 2 | Dudhnath | .. | „ | 47 | 57 | 104 | 47 | 14 | 15 | 68 | 68 | 136 | 85 | 14 | 22 |
| 3 | Maha Singh | .. | „ | 47 | 47 | 94 | 47 | 14 | 15 | 63 | 83 | 146 | 59 | 14 | 15 |
| 4 | Balvirsingh | .. | „ | 60 | 60 | 120 | 66 | 12 | 20 | 55 | 65 | 120 | 91 | 12 | 30 |
| 5 | Bhimsingh | .. | „ | 54 | 66 | 120 | 20 | 12 | 13 | 62 | 58 | 120 | 50 | 12 | 20 |
| 6 | Balvirsingh | .. | „ | 60 | 60 | 120 | 26 | 12 | 12 | 68 | 52 | 120 | 56 | 12 | 22 |
| 7 | Dalipsingh | .. | „ | 77 | 43 | 120 | 43 | 12 | 12 | 52 | 68 | 120 | 59 | 12 | 22 |
| 8 | Parmarsingh | .. | „ | 75 | 45 | 120 | 45 | 12 | 12 | 61 | 59 | 120 | 58 | 12 | 22 |
| 9 | Randhirsingh | .. | „ | 52 | 68 | 120 | 39 | 12 | 12 | 68 | 52 | 120 | 59 | 12 | 22 |
| 10 | Gangaprasad | .. | „ | 53 | 67 | 120 | 48 | 12 | 12 | 61 | 59 | 120 | 96 | 12 | 25 |
| 11 | Hariprakash | .. | „ | 58 | 62 | 120 | 31½ | 12 | 12 | 60 | 60 | 120 | 58 | 12 | 22 |
| 12 | Bhagchandra | .. | „ | 59 | 61 | 120 | 38 | 12 | 12 | 63 | 57 | 120 | 53 | 12 | 22 |
| 13 | Rameshchandra | .. | „ | 57 | 63 | 120 | 37 | 12 | 12 | 59 | 61 | 120 | 72 | 12 | 33 |
| 14 | Vahasingh | .. | „ | 56 | 64 | 120 | 66 | 12 | 20 | 60 | 60 | 120 | 90 | 12 | 33 |
| 15 | Abhayasingh | .. | „ | 55 | 65 | 120 | 37 | 12 | 12 | 59 | 61 | 120 | 17 | 12 | 5 |
| 16 | Rajendrabhai | .. | „ | 62 | 58 | 120 | 40 | 12 | 12 | 52 | 68 | 120 | 59 | 12 | 22 |
| 17 | Laxminarayan | .. | „ | 64 | 56 | 120 | 19 | 12 | 10 | 65 | 55 | 120 | 30 | 12 | 10 |
| 18 | Hemchandra | .. | „ | 56 | 64 | 120 | 42 | 12 | 10 | 53 | 67 | 120 | 67 | 12 | 20 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Mangoram | 51 | 28 | 28 | 56 | 16 | 12 | 10 | 59 | 61 | 120 | 27 | 12 | 10 |
| 20 | Gangadevi | ,, | 52 | 68 | 120 | 32 | 12 | 12 | 57 | 63 | 120 | 48 | 12 | 20 |
| 21 | Ramratidevi | ,, | 54 | 66 | 120 | 33 | 12 | 13 | 54 | 66 | 120 | 58 | 12 | 20 |
| 22 | Rajkumari | ,, | 59 | 61 | 120 | 42 | 12 | 12 | 57 | 63 | 120 | 70 | 12 | 20 |
| 23 | Sharda | ,, | 61 | 59 | 120 | 44 | 12 | 12 | 61 | 59 | 120 | 71 | 12 | 20 |
| 24 | Indraben | ,, | 62 | 58 | 120 | 37 | 12 | 12 | 68 | 52 | 120 | 23 | 12 | 10 |
| 25 | Premshankar Shastri | ,, | 69 | 51 | 120 | 33 | 12 | 12 | 65 | 55 | 120 | 55 | 12 | 15 |
| 26 | Sardar Bhai | ,, | 67 | 53 | 120 | 32 | 12 | 12 | 60 | 60 | 120 | 60 | 12 | 15 |
| 27 | Ramakant | ,, | 66 | 54 | 120 | 24 | 12 | 12 | 57 | 63 | 120 | 58 | 12 | 13 |
| 28 | Ranvirbhai | ,, | 65 | 55 | 120 | 20 | 12 | 11 | 63 | 57 | 120 | 35 | 12 | 13 |
| 29 | Gangavantbhai | ,, | 62 | 58 | 120 | 37 | 12 | 12 | 65 | 55 | 120 | 70 | 12 | 15 |
| 30 | Shivnarayan | ,, | 63 | 57 | 120 | 63 | 12 | 20 | 59 | 61 | 120 | 98 | 12 | 30 |
| 31 | Richpalbhai | ,, | 61 | 59 | 120 | 40 | 12 | 12 | 59 | 61 | 120 | 59 | 12 | 12 |
| 32 | Kapilbhai | ,, | 60 | 60 | 120 | 35 | 12 | 13 | 56 | 64 | 120 | 37 | 12 | 12 |
| 33 | Ramphalbhai | ,, | 62 | 58 | 120 | 23 | 12 | 10 | 62 | 68 | 120 | 31 | 12 | 10 |
| 34 | Kilade | ,, | 63 | 57 | 120 | 34 | 12 | 10 | 65 | 55 | 120 | 46 | 12 | 12 |
| 35 | Ramshwarupbhai | ,, | 60 | 60 | 120 | 10 | 12 | 4 | 63 | 57 | 120 | 37 | 12 | 14 |
| 36 | Rajandranath | ,, | 63 | 57 | 120 | 47 | 12 | 15 | 58 | 62 | 120 | 62 | 12 | 15 |
| 37 | Vakilchandra | ,, | 61 | 59 | 120 | 24 | 12 | 10 | 62 | 58 | 120 | 46 | 12 | 18 |
| 38 | Harpalbhai | ,, | 62 | 58 | 120 | 34 | 12 | 10 | 60 | 60 | 120 | 76 | 12 | 19 |
| 39 | Ramdhanbhai | ,, | 59 | 61 | 120 | 61 | 12 | 20 | 60 | 60 | 120 | 76 | 12 | 19 |
| 40 | BhimSingh | ,, | 62 | 58 | 120 | 34 | 12 | 10 | 60 | 60 | 120 | 62 | 12 | 22 |
| 41 | Ramkrishan | ,, | 63 | 57 | 120 | 36 | 12 | 12 | 61 | 59 | 120 | 51 | 12 | 22 |
| 42 | Sumanprasad Jain | ,, | 64 | 56 | 120 | 45 | 12 | 14 | 60 | 60 | 120 | 67 | 12 | 23 |
| 43 | Rajendraprasad | ,, | 65 | 55 | 120 | 11 | 12 | 3 | 62 | 58 | 120 | 30 | 12 | 10 |
| 44 | Udamiram | ,, | 68 | 52 | 120 | 45 | 12 | 13 | 60 | 60 | 120 | 63 | 12 | 16 |
| 45 | Roshanlal | ,, | 63 | 57 | 120 | 36 | 12 | 12 | 62 | 58 | 120 | 56 | 12 | 14 |
| 46 | Rupnarayanbhai | ,, | 68 | 52 | 120 | 19 | 12 | 10 | 59 | 51 | 120 | 32 | 12 | 15 |
| 47 | Mahendrarambhai | ,, | 67 | 53 | 120 | 36 | 12 | 12 | 60 | 60 | 120 | 63 | 12 | 12 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | Dinanathbhai | .. | 51 | 62 | 58 | 120 | 36 | 12 | 12 | 62 | 58 | 120 | 53 | 12 | 13 |
| 49 | Madansinghbhai | .. | " | 63 | 57 | 120 | 36 | 12 | 13 | 62 | 58 | 120 | 53 | 12 | 14 |
| 50 | Balvantsingh | .. | " | 65 | 55 | 120 | 29 | 12 | 12 | 63 | 57 | 120 | 52 | 12 | 15 |
| 51 | Vanmaribhai | .. | " | 66 | 54 | 120 | 27 | 12 | 12 | 65 | 55 | 120 | 49 | 12 | 16 |
| 52 | Banarashibhai | .. | " | 57 | 63 | 120 | 15 | 12 | 12 | 67 | 53 | 120 | 45 | 12 | 17 |
| 53 | Tekchand | .. | " | 53 | 67 | 120 | 15 | 12 | 12 | 67 | 53 | 120 | 48 | 12 | 12 |
| 54 | Harishrambhai | ... | " | 63 | 57 | 120 | 32 | 12 | 13 | 60 | 60 | 120 | 62 | 12 | 13 |
| 55 | Mahashi | .. | " | 54 | 56 | 120 | 34 | 12 | 12 | 60 | 60 | 120 | 57 | 12 | 14 |
| 56 | Mahavirabhai | .. | " | 61 | 59 | 120 | 23 | 12 | 12 | 68 | 52 | 120 | 47 | 12 | 15 |
| 57 | Santoshkumari Jain | .. | " | 63 | 57 | 120 | 38 | 12 | 12 | 60 | 60 | 120 | 62 | 12 | 16 |
| 58 | Shantidevi | .. | " | 64 | 56 | 120 | 19 | 12 | 10 | 66 | 54 | 120 | 39 | 12 | 12 |
| 59 | Darshandevi | .. | " | 55 | 65 | 120 | 14 | 12 | 5 | 65 | 55 | 120 | 45 | 12 | 13 |
| 60 | Santoshdevi | .. | " | 64 | 56 | 120 | 19 | 12 | 5 | 69 | 51 | 120 | 37 | 12 | 15 |
| 61 | Vimladevi | .. | " | 64 | 56 | 120 | 14 | 12 | 3 | 70 | 50 | 120 | 33 | 12 | 15 |
| 62 | Shardadevi | .. | " | 55 | 65 | 120 | 19 | 12 | 5 | 60 | 60 | 120 | 33 | 12 | 13 |
| 63 | Mayadevi | .. | " | 55 | 65 | 120 | 17 | 12 | 3 | 60 | 60 | 120 | 40 | 12 | 15 |
| 64 | Milapchandrabhai | .. | " | 57 | 63 | 120 | 20 | 12 | 5 | .. | ... | .. | .. | .. | .. |
| 65 | Chhoturambhai | .. | " | 58 | 62 | 120 | 24 | 12 | 6 | .. | .. | .. | .. | .. | .. |
|  | TOTAL | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 7,597 | 3,435 | .. | .. |

Name of Parishramalaya : Ambar Charkha Parishramalaya, Ambala City (Punjab).

Date of Starting 6-1-56
No. of Charkha sets 29.

| S. No. | Name of Operative | Class of Spinner Age-Sex | No. of days of attendance | From 10th March 56 to 27th March 56 |  |  |  |  |  | From 28th March 56 to 13th April 56 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  |  |  | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Mayadevi . . . . . | 29 F | 84 | 44 | 55 | 99 | 57 | 14 | 30 | 40 | 50 | 90 | 51 | 16 | 25 |
| 2 | Ranibai . . . . . | 28 F | 75 | 44 | 55 | 99 | 57 | 14 | 30 | 40 | 50 | 90 | 52 | 16 | 26 |
| 3 | Santoshkumari . . . . . | 16 F | 84 | 45 | 57 | 102 | 117 | 16 | 56 | 30 | 60 | 90 | 139 | 16 | 68 |
| 4 | Darshnakumari . . . . . | 15 F | 84 | 45 | 57 | 102 | 117 | 16 | 56 | 30 | 60 | 90 | 139 | 16 | 68 |
| 5 | Shyanidevi . . . . . | 14 F | 84 | 45 | 57 | 102 | 60 | 14 | 34 | 33 | 60 | 93 | 55 | 13 | 34 |
| 6 | Prakashkumari . . . . . | 14 F | 82 | 45 | 57 | 102 | 60 | 14 | 33 | 33 | 60 | 93 | 56 | 13 | 34 |
| 7 | Miragabai . . . . . | 36 F | 84 | 45 | 57 | 102 | 68 | 14 | 27 | 40 | 55 | 95 | 93 | 15 | 49 |
| 8 | Vevanvali . . . . . | 30 F | 84 | 45 | 57 | 102 | 68 | 14 | 27 | 40 | 55 | 95 | 93 | 55 | 49 |
| 9 | Kartarbai . . . . . | 28 F | 84 | 45 | 57 | 102 | 44 | 13 | 25 | 40 | 55 | 95 | 63 | 13 | 37 |
| 10 | Miragabai . . . . . | 25 F | 84 | 45 | 57 | 102 | 44 | 13 | 26 | 40 | 55 | 95 | 63 | 13 | 37 |
| 11 | Rajkumari . . . . . | 20 F | 83 | 42 | 54 | 96 | 63 | 16 | 31 | 45 | 50 | 95 | 78 | 16 | 36 |
| 12 | Shantadevi . . . . . | 18 F | 81 | 42 | 54 | 96 | 64 | 16 | 32 | 45 | 50 | 95 | 79 | 16 | 36 |
| 13 | Bhagvati . . . . . | 45 F | 78 | 45 | 57 | 102 | 37 | 14 | 21 | 40 | 50 | 90 | 48 | 14 | 27 |
| 14 | Vevanvali . . . . . | 15 F | 56 | 45 | 57 | 102 | 38 | 14 | 21 | 40 | 50 | 90 | 48 | 14 | 27 |
| 15 | Sahanidevi . . . . . | 35 F | 77 | 42 | 55 | 97 | 48 | 14 | 28 | 40 | 50 | 90 | 48 | 17 | 22 |
| 16 | Pushparani . . . . . | 15 F | 76 | 42 | 55 | 97 | 49 | 14 | 28 | 40 | 50 | 90 | 48 | 17 | 22 |
| 17 | Savarnakanta . . . . . | 14 F | 75 | 45 | 57 | 102 | 47 | 12 | 28 | 40 | 50 | 90 | 82 | 14 | 43 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Ishwardevi . . . . . | 40 F | 78 | 45 | 57 | 102 | 47 | 12 | 28 | 40 | 50 | 90 | 82 | 14 | 43 |
| 19 | Rampyari . . . . . | 16 F | 75 | 45 | 57 | 102 | 39 | 14 | 21 | 45 | 60 | 105 | 38 | 14 | 22 |
| 20 | Shiladevi . . . . . | 17 F | 65 | 45 | 57 | 102 | 40 | 14 | 21 | 45 | 60 | 105 | 38 | 14 | 22 |
| 21 | Lajjadevi . . . . . | 18 F | 66 | 45 | 57 | 102 | 42 | 14 | 22 | 40 | 50 | 90 | 58 | 15 | 30 |
| 22 | Viravali . . . . . | 42 F | 63 | 45 | 57 | 102 | 42 | 14 | 23 | 40 | 50 | 90 | 59 | 15 | 30 |
| 23 | Jivanbai . . . . . | 18 F | 51 | 36 | 42 | 78 | 41 | 13 | 25 | 40 | 50 | 90 | 146 | 16 | 70 |
| 24 | Sumitrarani . . . . . | 25 F | 31 | 36 | 42 | 78 | 42 | 13 | 25 | 40 | 50 | 90 | 48 | 14 | 25 |
| 25 | Harsharankaur . . . . . | 16 F | 48 | 40 | 52 | 92 | 29 | 13 | 18 | 40 | 50 | 90 | 48 | 14 | 25 |
| 26 | Ramvantkaur . . . . . | 16 F | 49 | 40 | 52 | 92 | 29 | 13 | 18 | 40 | 50 | 90 | 33 | 13 | 20 |
| 27 | Jamnadevi . . . . . | 29 F | 37 | 45 | 57 | 102 | 18 | 13 | 10 | 40 | 50 | 90 | 34 | 13 | 20 |
| 28 | Shiladevi . . . . . | 16 F | 38 | 45 | 57 | 102 | 18 | 13 | 11 | | | | | | |
| 29 | Krishnadevi . . . . . | 16 F | 55 | 39 | 51 | 90 | 48 | 13 | 29 | 45 | 50 | 95 | 54 | 14 | 29 |
| 30 | Mishesaradevi . . . . . | 16 F | 55 | 39 | 51 | 90 | 49 | 13 | 29 | 45 | 50 | 95 | 53 | 14 | 30 |
| 31 | Kamleshkumari . . . . | 16 F | 55 | 30 | 52 | 91 | 40 | 13 | 25 | 40 | 50 | 90 | 48 | 14 | 26 |
| 32 | Purnadevi . . . . . | 18 F | 55 | 39 | 52 | 91 | 40 | 13 | 25 | 40 | 50 | 90 | 48 | 14 | 26 |
| 33 | Ranibai . . . . . | 14 F | 55 | 41 | 50 | 91 | 28 | 12 | 19 | 45 | 50 | 95 | 30 | 13 | 18 |
| 34 | Shkuntaladevi . . . . . | 14 F | 54 | 42 | 50 | 92 | 28 | 12 | 19 | 45 | 50 | 95 | 31 | 13 | 18 |
| 35 | Vimalarani . . . . . | 18 F | 50 | 39 | 50 | 89 | 41 | 14 | 26 | 40 | 50 | 90 | 45 | 15 | 25 |
| 36 | Gajendrakuvar . . . . . | 17 F | 17 | 55 | 39 | 51 | 90 | 41 | 14 | 27 | 40 | 50 | 90 | 46 | 15 |
| 37 | Pritamkuvar . . . . . | 22 F | 54 | 42 | 50 | 92 | 26 | 12 | 20 | 45 | 50 | 95 | 26 | 13 | 16 |
| 38 | Manjitkuvar . . . . . | 14 F | 51 | 42 | 50 | 92 | 27 | 12 | 19 | 45 | 50 | 95 | 26 | 13 | 17 |
| 39 | Rameshwari . . . . . | 30 F | 47 | 37 | 51 | 88 | 26 | 12 | 18 | 45 | 50 | 95 | 24 | 13 | 15 |
| 40 | Shantadevi . . . . . | 23 F | 50 | 37 | 50 | 87 | 27 | 12 | 18 | 45 | 50 | 95 | 25 | 13 | 15 |
| 41 | Dhandevi . . . . . | 40 F | 55 | 40 | 50 | 90 | 33 | 13 | 20 | 45 | 55 | 100 | 34 | 16 | 17 |
| 42 | Rajmohani . . . . . | 28 F | 46 | 40 | 51 | 91 | 34 | 13 | 21 | 45 | 55 | 100 | 35 | 16 | 17 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43 | Vimladevi | 15 F | 56 | 38 | 49 | 87 | 45 | 13 | 21 | 45 | 55 | 100 | 86 | 16 | 33 |
| 44 | Ishwardevi | 40 F | 53 | 38 | 49 | 87 | 45 | 13 | 28 | 45 | 55 | 100 | 66 | 16 | 33 |
| 45 | Vidhyavari | 20 F | 55 | 40 | 50 | 90 | 28 | 12 | 20 | 45 | 55 | 100 | 41 | 14 | 22 |
| 46 | Somvati | 40 F | 50 | 40 | 50 | 90 | 29 | 12 | 20 | 45 | 55 | 100 | 42 | 14 | 23 |
| 47 | Gajendrakuvar | 17 F | 47 | 40 | 49 | 89 | 32 | 13 | 21 | 40 | 50 | 90 | 38 | 13 | 23 |
| 48 | Fulidevi | 16 F | 54 | 39 | 49 | 88 | 33 | 13 | 20 | 40 | 50 | 90 | 24 | 13 | 23 |
| 49 | Kamaladevi | 13 F | 47 | 36 | 50 | 86 | 13 | 11 | 9 | 45 | 50 | 100 | 25 | 11 | 18 |
| 50 | Dayavanti | 17 F | 44 | 37 | 50 | 87 | 13 | 11 | 10 | 45 | 55 | 100 | 25 | 11 | 18 |
| 51 | Kantadevi | 20 F | 44 | 40 | 51 | 91 | 20 | 12 | 15 | 45 | 50 | 95 | 26 | 13 | 5 |
| 52 | Kukvantkuvar | 16 F | 45 | 40 | 51 | 91 | 20 | 12 | 15 | 45 | 50 | 95 | 17 | 14 | 16 |
| 53 | Krishnavati | 35 F | 45 | 37 | 52 | 89 | 11 | 10 | 8 | 45 | 50 | 95 | 17 | 14 | 12 |
| 54 | Gomatidevi | 35 F | 38 | 38 | 51 | 89 | 11 | 10 | 9 | 45 | 50 | 95 | 17 | 14 | 12 |
| 55 | Ishwarkuvar | 28 F | 40 | 40 | 49 | 89 | 14 | 9 | 10 | 45 | 50 | 95 | 20 | 12 | 14 |
| 56 | Savarnadevi | 14 F | 43 | 39 | 50 | 89 | 15 | 9 | 10 | 45 | 50 | 95 | 21 | 12 | 15 |
| 57 | Vasantkumari | 12 F | 43 | 26 | 38 | 64 | 14 | 11 | 10 | 25 | 35 | 60 | 13 | 12 | 8 |
| 58 | Shilladevi | 25 F | 19 | 26 | 38 | 64 | 15 | 11 | 10 | 25 | 35 | 60 | 13 | 12 | 19 |
| 59 | Rajrani | 16 F | 42 | 32 | 47 | 81 | 20 | 10 | 15 | 45 | 55 | 100 | 25 | 13 | 16 |
| 60 | Sitadevi | 14 F | 42 | 34 | 47 | 81 | 21 | 40 | 15 | 45 | 55 | 100 | 26 | 13 | 16 |
| 61 | Chandrakanta | 16 F | 40 | 34 | 44 | 78 | 8 | 9 | 7 | 45 | 55 | 100 | 15 | 12 | 10 |
| 62 | Prakashdevi | 14 F | 37 | 34 | 44 | 78 | 9 | 9 | 7 | 45 | 55 | 100 | 15 | 12 | 11 |
| 63 | Jayadeikuvar | 17 F | 38 | 40 | 50 | 90 | 24 | 12 | 15 | 45 | 55 | 100 | 32 | 13 | 23 |
| 64 | Bhagvati | 50 F | 32 | 52 | 60 | 112 | 24 | 12 | 19 | 45 | 55 | 100 | 32 | 13 | 23 |
| 65 | Shamidevi | 13 F | 42 | 41 | 49 | 90 | 23 | 11 | 17 | 45 | 55 | 100 | 30 | 13 | 18 |
| 66 | Chandandevi | 13 F | 40 | 40 | 50 | 90 | 23 | 11 | 18 | 45 | 55 | 100 | 31 | 13 | 19 |
| 67 | Shantidevi | 15 F | 44 | 41 | 49 | 90 | 33 | 13 | 21 | 45 | 55 | 100 | 43 | 14 | 25 |
| 68 | Gurucharankuvar | 14 F | 42 | 41 | 49 | 90 | 33 | 13 | 20 | 45 | 55 | 100 | 43 | 14 | 25 |
| | | | | | | | | | | | | 6,247 | 3,111 | | |

Name of Parishramalaya : Coornool (Punjab.)

Date of Starting: 2-1-56
Number of Charkha: 31.

| S. No. | Name of operative | Class of Spinner Age Sex | No. of days of Trg. | From 10th March 56 to 27th March 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March 56 to 13th April 1956 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Sundarkaur . . . . . | 18 F | 85 | 47 | 56 | 103 | 69 | 13 | 41 | 42 | 58 | 100 | 75 | 14 | 42 |
| 2 | Urmiladevi . . . . . | 16 F | 80 | 48 | 58 | 106 | 69 | 13 | 41 | 44 | 59 | 103 | 76 | 14 | 42 |
| 3 | Atamdevi . . . . . | 10 F | 80 | 39 | 57 | 96 | 64 | 14 | 32 | 28 | 58 | 86 | 46 | 14 | 24 |
| 4 | Rampyari . . . . . | 22 F | 55 | 40 | 58 | 98 | 64 | 14 | 32 | 30 | 60 | 90 | 47 | 14 | 25 |
| 5 | Gobindadevi . . . . . | 18 F | 80 | 41 | 60 | 101 | 62 | 15 | 31 | 34 | 66 | 100 | 52 | 16 | 25 |
| 6 | Bhiravadai . . . . . | 17 F | 80 | 40 | 61 | 101 | 62 | 15 | 32 | 34 | 67 | 101 | 53 | 16 | 25 |
| 7 | Kundandevi . . . . . | 30 F | 85 | 36 | 61 | 97 | 66 | 16 | 34 | 32 | 46 | 78 | 40 | 14 | 15 |
| 8 | Tulsibai . . . . . | 35 F | 74 | 37 | 60 | 97 | 67 | 16 | 35 | 32 | 46 | 78 | 40 | 14 | 23 |
| 9 | Padmarani . . . . . | 20 F | 79 | 42 | 58 | 100 | 84 | 14 | 46 | 30 | 56 | 86 | 61 | 14 | 33 |
| 10 | Chimanibai . . . . . | 35 F | 85 | 43 | 58 | 101 | 85 | 14 | 46 | 32 | 58 | 90 | 62 | 14 | 33 |
| 11 | Chinibai . . . . . | 35 F | 85 | 40 | 55 | 95 | 58 | 14 | 31 | 36 | 58 | 94 | 44 | 13 | 25 |
| 12 | Vajiradevi . . . . . | 33 F | 79 | 42 | 56 | 98 | 58 | 14 | 31 | 38 | 58 | 96 | 45 | 13 | 24 |
| 13 | Devibai . . . . . | 40 F | 87 | 50 | 56 | 106 | 92 | 13 | 55 | 42 | 50 | 92 | ·70 | 15 | 39 |
| 14 | Ramdevi . . . . . | 27 F | 76 | 57 | 58 | 115 | 92 | 13 | 56 | 44 | 58 | 102 | 75 | 15 | 39 |
| 15 | Fulvanti . . . . . | 32 F | 75 | 36 | 50 | 86 | 37 | 13 | 30 | 34 | 56 | 90 | 39 | 13 | 22 |
| 16 | Pusparani . . . . . | 18 F | 78 | 38 | 51 | 89 | 37 | 13 | 21 | 35 | 56 | 91 | 39 | 13 | 22 |
| 17 | Kaushlyadevi . . . . . | 25 F | 86 | 44 | 58 | 102 | 63 | 13 | 36 | 42 | 61 | .03 | 67 | 13 | 39 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Rajrani | 16 F | 85 | 37 | 58 | 95 | 44 | 13 | 23 | 40 | 62 | 102 | 64 | 14 | 32 |
| 19 | Bhojabai | 45 F | 80 | 36 | 60 | 96 | 44 | 13 | 23 | 54 | 63 | 117 | 65 | 14 | 32 |
| 20 | Satairani | 25 F | 86 | 36 | 51 | 87 | 42 | 16 | 20 | 28 | 54 | 82 | 54 | 13 | 18 |
| 21 | Shantidevi | 19 F | 87 | 44 | 60 | 104 | 63 | 13 | 36 | 42 | 61 | 103 | 67 | 13 | 39 |
| 22 | Sudeshkumari | 17 F | 80 | 39 | 50 | 89 | 43 | 16 | 20 | 29 | 55 | 84 | 54 | 13 | 18 |
| 23 | Puspakumari | 19 F | 43 | 36 | 54 | 90 | 66 | 14 | 33 | 26 | 42 | 68 | 42 | 14 | 20 |
| 24 | Uttamdevi | 50 F | 78 | 40 | 56 | 96 | 67 | 14 | 33 | 28 | 42 | 70 | 43 | 14 | 20 |
| 25 | Viradevi | 40 F | 78 | 36 | 56 | 92 | 58 | 14 | 30 | 34 | 48 | 82 | 45 | 14 | 25 |
| 26 | Kaushlyadevi | 40 F | 59 | 37 | 58 | 95 | 59 | 14 | 30 | 36 | 48 | 84 | 46 | 14 | 25 |
| 27 | Gandadevi | 25 F | 40 | 9 | 40 | 49 | 60 | 44 | 12 | 28 | 40 | 68 | 56 | 49 | 13 |
| 28 | Ramdevi | 22 F | 40 | 10 | 43 | 52 | 60 | 44 | 12 | 28 | 39 | 67 | 58 | 49 | 13 |
| 29 | Vishandevi | 18 F | 59 | 18 | 41 | 59 | 58 | 39 | 12 | 25 | 42 | 67 | 60 | 49 | 12 |
| 30 | Devibai | 30 F | 55 | 18 | 42 | 60 | 60 | 39 | 12 | 25 | 44 | 89 | 59 | 50 | 12 |
| 31 | Satyarani | 40 F | 55 | 19 | 36 | 55 | 58 | 35 | 30 | 21 | 38 | 59 | 56 | 48 | 13 |
| 32 | Ramdevi | 40 F | 55 | 19 | 37 | 56 | 60 | 35 | 13 | 22 | 38 | 60 | 55 | 48 | 13 |
| 33 | Dhuparadidevi | 27 F | 59 | 34 | 44 | 78 | 60 | 56 | 14 | 32 | 38 | 70 | 56 | 51 | 14 |
| 34 | Rampyari | 40 F | 58 | 34 | 45 | 79 | 61 | 55 | 14 | 32 | 40 | 72 | 56 | 51 | 14 |
| 35 | Lilavanti | 22 F | 58 | 21 | 36 | 57 | 56 | 52 | 16 | 25 | 30 | 55 | 58 | 51 | 19 |
| 36 | Ramdevi | 22 F | 59 | 22 | 36 | 58 | 58 | 53 | 16 | 25 | 32 | 57 | 59 | 52 | 19 |
| 37 | Karmadevi | 20 F | 57 | 10 | 34 | 44 | 58 | 31 | 13 | 19 | 36 | 55 | 60 | 39 | 13 |
| 38 | Chetandevi | 21 F | 59 | 10 | 35 | 55 | 59 | 32 | 13 | 19 | 38 | 57 | 62 | 39 | 13 |
| 39 | Ishwardevi | 27 F | 59 | 12 | 37 | 49 | 31 | 43 | 13 | 24 | 36 | 60 | 52 | 44 | 13 |
| 40 | Kamleshkumari | 17 F | 56 | 13 | 38 | 51 | 62 | 43 | 13 | 24 | 38 | 62 | 54 | 43 | 13 |
| 41 | Durgadevi | 25 F | 58 | 8 | 38 | 46 | 58 | 44 | 13 | 26 | 36 | 62 | 58 | 41 | 14 |
| 42 | Sitadevi | 21 F | 56 | 9 | 40 | 49 | 59 | 44 | 13 | 27 | 37 | 64 | 59 | 41 | 14 |
| 43 | Laxmidevi | 30 F | 53 | 12 | 34 | 46 | 56 | 45 | 13 | 26 | 40 | 66 | 60 | 53 | 15 |
| 44 | Pendibai | 35 F | 56 | 13 | 36 | 49 | 54 | 44 | 13 | 26 | 41 | 67 | 60 | 53 | 15 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Sunibai . . . . | 40 F | 57 | 13 | 27 | 42 | 69 | 52 | 44 | 13 | 27 | 30 | 57 | 51 | 13 |
| 46 | Jamanadevi . . . . | 35 F | 57 | 41 | 44 | 85 | 58 | 47 | 15 | 46 | 37 | 83 | 54 | 81 | 21 |
| 47 | Hukamdevi . . . . | 40 F | 58 | 42 | 45 | 87 | 59 | 100 | 15 | 47 | 38 | 85 | 54 | 81 | 21 |
| 48 | Bhagavanti . . . . | 25 F | 59 | 13 | 34 | 47 | 48 | 25 | 13 | 15 | 28 | 43 | 52 | 25 | 13 |
| 49 | Bhagvandevi . . . . | 25 F | 59 | 13 | 34 | 47 | 58 | 26 | 13 | 16 | 29 | 45 | 57 | 25 | 13 |
| 50 | Premvati . . . . | 26 F | 58 | 20 | 38 | 58 | 52 | 49 | 16 | 21 | 30 | 51 | 52 | 39 | 16 |
| 51 | Ramdevi . . . . | 26 F | 59 | 21 | 38 | 59 | 54 | 49 | 16 | 22 | 29 | 51 | 50 | 38 | 16 |
| 52 | Chamandevi . . . . | 27 F | 59 | 16 | 38 | 54 | 52 | 29 | 12 | 18 | 31 | 49 | 50 | 29 | 12 |
| 53 | Krishnadevi . . . . | 27 F | 59 | 16 | 40 | 56 | 50 | 30 | 12 | 19 | 32 | 51 | 28 | 12 | 18 |
| 54 | Surindra Kaur . . . . | 18 F | 59 | 35 | 50 | 85 | 30 | 13 | 17 | 22 | 52 | 74 | 25 | 16 | 13 |
| 55 | Mangladevi . . . . | 20 F | 59 | 34 | 51 | 85 | 31 | 13 | 18 | 23 | 50 | 73 | 26 | 16 | 13 |
| 56 | Darshankaur . . . . | 20 F | 55 | 36 | 53 | 89 | 39 | 13 | 20 | 28 | 52 | 80 | 32 | 16 | 14 |
| 57 | Lajwanti . . . . | 30 F | 54 | 38 | 54 | 92 | 39 | 13 | 20 | 29 | 52 | 81 | 32 | 16 | 14 |
| 58 | Sitadevi . . . . | 40 F | 56 | 39 | 56 | 95 | 49 | 13 | 29 | 36 | 54 | 90 | 47 | 14 | 26 |
| 59 | Gulodevi | 45 F | 56 | 40 | 58 | 98 | 50 | 13 | 29 | 36 | 56 | 92 | 47 | 14 | 26 |
| 60 | Laxmidevi . . . . | 40 F | 59 | 34 | 48 | 82 | 24 | 12 | 15 | 26 | 52 | 78 | 23 | 13 | 14 |
| 61 | Dastan Kaur . . . . | 35 F | 40 | 36 | 50 | 86 | 24 | 12 | 66 | 28 | 54 | 82 | 23 | 13 | 14 |
| 62 | Krishnadevi . . . . | 35 F | 35 | 32 | 96 | 128 | 29 | 12 | 17 | 34 | 46 | 80 | 35 | 14 | 81 |
| 63 | Krishnadevi . . . . | 35 F | 39 | 34 | 48 | 82 | 29 | 12 | 17 | 34 | 48 | 82 | 35 | 14 | 29 |
| 64 | Devibai . . . . | 25 F | 34 | 20 | 51 | 80 | 17 | 13 | 10 | 30 | 50 | 80 | 23 | 13 | 14 |
| 65 | Ishwardevi . . . . | 18 F | 33 | 28 | 52 | 80 | 17 | 13 | 11 | 32 | 52 | 84 | 22 | 13 | 15 |
| 66 | Darshandevi . . . . | 18 F | 34 | 30 | 52 | 82 | 18 | 11 | 52 | 30 | 60 | 90 | 33 | 13 | 19 |
| 67 | Devibai . . . . | 35 F | 32 | 52 | 54 | 86 | 18 | 12 | 12 | 30 | 60 | 90 | 34 | 13 | 20 |
| 68 | Pushpakumari . . . . | 20 F | 34 | 29 | 52 | 81 | 21 | 10 | 14 | 32 | 50 | 82 | 30 | 13 | 18 |
| 69 | Radhabai . . . . | 35 F | 34 | 28 | 54 | 82 | 20 | 10 | 14 | 30 | 50 | 80 | 30 | 13 | 19 |
| 70 | Rampyari . . . . | 50 F | 31 | 35 | 66 | 101 | 46 | 11 | 28 | 30 | 52 | 82 | 35 | 14 | 19 |
| 71 | Krishnavanti . . . . | 25 F | 35 | 36 | 67 | 103 | 46 | 13 | 28 | 30 | 54 | 84 | 36 | 14 | 19 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | Devibai . . . . | 35 | F | 33 | 22 | 44 | 66 | 20 | 13 | 14 | 26 | 50 | 76 | 22 | 12 | 14 |
| 73 | Rukmandevi . . . . | 50 | F | 36 | 22 | 40 | 68 | 29 | 13 | 14 | 26 | 52 | 78 | 23 | 12 | 15 |
| 74 | Satibai . . . . | 35 | F | 29 | 31 | 59 | 90 | 29 | 12 | 18 | 30 | 44 | 74 | 20 | 14 | 11 |
| 75 | Vaidhyavanti . . . . | 27 | F | 33 | 32 | 60 | 92 | 30 | 12 | 16 | 30 | 44 | 74 | 20 | 14 | 12 |
| 76 | Pushpavati . . . . | 18 | F | 32 | 32 | 57 | 89 | 24 | 11 | 16 | 32 | 60 | 92 | 45 | 13 | 25 |
| 77 | Kishnadevi . . . . | 25 | F | 31 | 34 | 58 | 92 | 25 | 11 | 16 | 34 | 60 | 94 | 44 | 13 | 25 |
| 78 | Sitadevi . . . . | 18 | F | 27 | 34 | 52 | 86 | 19 | 13 | 12 | 28 | 48 | 76 | 25 | 16 | 13 |
| 79 | Krishnakumari . . . . | 20 | F | 27 | 34 | 52 | 86 | 19 | 13 | 11 | 28 | 48 | 76 | 25 | 16 | 13 |
| 80 | Mohandevi . . . . | 22 | F | 31 | 38 | 54 | 92 | 20 | 13 | 12 | 28 | 50 | 78 | 25 | 16 | 14 |
| | Total | | | | | | | | | | | | 6,219 | 3,720 | | |

Name of Parishramalaya : **KASTURBA SEVA MANDIR**
New Township, Rajpura, PEPSU.

Date of Starting : 2-1-56.
Number of Charkha sets : 68

| S. No. | Name of operative | Class of Spinner Age. | Sex | No. of days of Trg. | From 10th March 56 to 27th March 56 Duration of work (Hours) Card-ing | Spg. | Total | Prodn. hanks | Count | Loss tolas | From 28th March 56 to 13th April, 56 Duration of work (Hours) Card-ing | Spg. | Total | Prodn. hanks | Count | Loss tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Shantideviji . . . . | 18 | F | 77 | 38 | 34 | 72 | 21 | 13 | 10 | 56 | 53 | 109 | 43 | 13 | 20 |
| 2 | Ishwardeviji . . . . | 22 | F | 77 | 41 | 42 | 83 | 65 | 13 | 35 | 35 | 53 | 88 | 88 | 14 | 45 |
| 3 | Linadevi . . . . | 16 | F | 81 | 39 | 47·30 | 86·30 | 41 | 16 | 16 | 39 | 54 | 93 | 93 | 16 | 45 |
| 4 | Jayvanti . . . . | 20 | F | 79½ | 40 | 42 | 82 | 57 | 14 | 28 | 55 | 47 | 102 | 72 | 17 | 36 |
| 5 | Subhagi . . . . | 20 | F | 82 | 47½ | 40½ | 88 | 54 | 14 | 22½ | 48 | 44 | 92 | 81 | 16 | 40 |
| 6 | Lajwanti . . . . | 18 | F | 81 | 35 | 41 | 76 | 50 | 16 | 22½ | 43 | 43 | 86 | 39 | 16 | 20 |
| 7 | Banti . . . . | 25 | F | 82½ | 47 | 41 | 88 | 55 | 13 | 30 | 49 | 51 | 100 | 73 | 14 | 36 |
| 8 | Kishanidevi . . . . | 30 | F | 76 | 40 | 35 | 75 | 54 | 12 | 30 | 72 | 19 | 91 | 24 | 13 | 15 |
| 9 | Khilandi . . . . | 35 | F | 75 | 48 | 49 | 97 | 41 | 12 | 25 | 37 | 60 | 97 | 70 | 12 | 40 |
| 10 | Rampyari . . . . | 27 | F | 70½ | 40 | 42 | 82 | 41 | 13 | 22½ | 50 | 43 | 97 | 60 | 12 | 30 |
| 11 | Bhave . . . . | 40 | F | 76½ | 40 | 48 | 88 | 37 | 12 | 22½ | 36 | 41 | 77 | 49 | 12 | 30 |
| 12 | Janki . . . . | 16 | F | 77 | 40½ | 47½ | 88 | 62 | 12 | 40 | 54 | 19 | 73 | 70 | 14 | 36 |
| 13 | Lajwanti . . . . | 20 | F | 71½ | 46 | 34 | 80 | 32 | 13 | 18¼ | 51 | 42 | 93 | 51 | 14 | 26 |
| 14 | Ramdevi . . . . | 14 | F | 73 | 41 | 45 | 86 | 35 | 13 | 23½ | 51 | 46 | 96 | 55 | 14 | 33 |
| 15 | Ghatdevi . . . . | 16 | F | 76 | 47 | 40 | 87 | 62 | 12 | 38¼ | 45 | 54 | 99 | 70 | 14 | 35 |
| 16 | Budhabai . . . . | 25 | F | 76½ | 40 | 41 | 81 | 30 | 11 | 15 | 43 | 44 | 87 | 63 | 13 | 31 |
| 17 | Mangli . . . . | 30 | F | 76½ | 40 | 47 | 87 | 42 | 9 | 15½ | 61 | 40 | 101 | 76 | 12 | 45 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Nihali | 40 F | 77 | 47½ | 41 | 88½ | 47 | 13 | 22½ | 54 | 41 | 95 | 57 | 13 | 30 |
| 19 | Indra Kaur | 20 F | 73 | 40½ | 42½ | 83 | 41 | 12 | 15 | 48 | 48 | 96 | 61 | 14 | 30 |
| 20 | Matu Kaur | 18 F | 70½ | 37 | 48 | 85 | 40 | 13 | 26 | 20 | 30 | 50 | 36 | 16 | 15 |
| 21 | Kaushlya | 20 F | 48½ | 45 | 41 | 86 | 41 | 13 | 25 | 34 | 40 | 74 | 56 | 16 | 25 |
| 22 | Uttami | 14 F | 57 | 38 | 48½ | 86½ | 38 | 13 | 21 | 46 | 55 | 101 | 81 | 15 | 38 |
| 23 | Bhagwani | 30 F | 55 | 34½ | 40 | 74½ | 25 | 14 | 21 | 45 | 54 | 99 | 72 | 15 | 36 |
| 24 | Bhagwanti | 18 F | 54 | 40 | 49 | 89 | 37 | 13 | 17½ | 58 | 46 | 104 | 68 | 14 | 35 |
| 25 | Lila | 20 F | 53½ | 39 | 46½ | 85½ | 25 | 13 | 15 | 50 | 40 | 90 | 60 | 13 | 35 |
| 26 | Shapuri | 13 F | 56 | 39½ | 46 | 85½ | 19 | 13 | 13½ | 56 | 53 | 109 | 54 | 16 | 25 |
| 27 | Yagali | 25 F | 58 | 40 | 47 | 88 | 27 | 13 | 15½ | 52 | 54 | 106 | 89 | 14 | 42 |
| 28 | Gekli | 13 F | 56 | 53½ | 34 | 87½ | 31 | 14 | 16 | 59 | 42 | 101 | 79 | 16 | 36 |
| 29 | Shiladevi | 14 F | 58 | 40½ | 48 | 88½ | 49 | 16 | 22½ | 46 | 47 | 93 | 105 | 14 | 50 |
| 30 | Satwanti | 17 F | 58 | 49 | 40½ | 89½ | 50 | 10 | 17½ | 57 | 46 | 113 | 63 | 16 | 30 |
| 31 | Jamunadevi | 25 F | 55½ | 38 | 49 | 87 | 46 | 13 | 22½ | 43 | 49 | 92 | 62 | 16 | 29 |
| 32 | Shankuntladevi | 30 F | 55½ | 47 | 41 | 88 | 46 | 14 | 20 | 61 | 43 | 104 | 79 | 16 | 40 |
| 33 | Virabai | 64 F | 55½ | 45 | 40 | 85 | 42 | 15 | 20 | 46 | 49 | 95 | 62 | 16 | 27 |
| 34 | Devibai | 21 F | 55½ | 41½ | 49 | 90½ | 27 | 8 | 15 | 46 | 51 | 97 | 55 | 14 | 30 |
| 35 | Ganeshibai | 30 F | 57 | 48½ | 41 | 89½ | 33 | 13 | 17½ | 51 | 51 | 102 | 61 | 13 | 38 |
| 36 | Sangeribai | 25 F | 58 | 41 | 47½ | 89½ | 45 | 13 | 25 | 50 | 51 | 101 | 60 | 10 | .. |
| 37 | Bebibai | 18 F | 81½ | 41 | 47 | 88 | 43 | 16 | 20½ | 50 | 38 | 88 | 75 | 20 | 35 |
| 38 | Lajvanti | 16 F | 53½ | 47 | 41½ | 88½ | 23 | 13 | 12½ | 43 | 60 | 103 | 71 | 13 | 45 |
| 39 | Laxmidevi | 20 F | 54 | 47 | 42 | 89 | 38 | 11 | 25 | 45 | 52 | 97 | 69 | 16 | 35 |
| 40 | Jamuna | 30 F | 57 | 47 | 42 | 89 | 35 | 10 | 25 | 48 | 49 | 107 | 80 | 13 | 50 |
| 41 | Prakashadevi | 22 F | 52 | 41½ | 47 | 88½ | 44 | 13 | 27½ | 53 | 46 | 99 | 78 | 15 | 40 |
| 42 | Nirmaladevi | 22 F | 46 | 41½ | 47 | 88½ | 44 | 13 | 27½ | 53 | 46 | 99 | 75 | 15 | 40 |
| 43 | Lajvanti | 14 F | 48½ | 40 | 49 | 89 | 17 | 19 | 10 | 52 | 46 | 98 | 23 | 18 | 8 |
| 44 | Krishnadevi | 16 F | 47½ | 48½ | 40 | 88½ | 25 | 14 | 15 | 44 | 48 | 92 | 60 | 12 | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Tharibai . . . . | 14 F | 48½ | 46 | 42 | 88 | 26 | 13 | 15 | 44 | 44 | 88 | 69 | 16 | 38 |
| 46 | Govindibai . . . . | 14 F | 30 | 39½ | 48½ | 88 | 11 | 11½ | 12½ | 41 | 40 | 81 | 30 | 13 | 16 |
| 47 | Ishwar . . . | 19 F | 46 | 41½ | 48 | 89½ | 45 | 13 | 25 | 50 | 48 | 98 | 135 | 16 | 70 |
| 48 | Jandevi . . | 19 F | 41 | 40 | 42 | 82 | 26 | 11 | 15 | 42 | 36 | 78 | 56 | 15 | 30 |
| 49 | Kushalidevi . . . | 17 F | 46 | 40½ | 48 | 88½ | 36 | 11 | 25 | 49 | 50 | 99 | 76 | 12 | 40 |
| 50 | Bhagvatidev . . . . | 16 F | 28½ | 45½ | 40 | 85½ | 21 | 12 | 12½ | 27 | 34 | 91 | 28 | 12 | 15 |
| 51 | Premibai . . . . | 24 F | 27 | 47½ | 42 | 89½ | 48 | 13 | 22½ | 47 | 47 | 94 | 70 | 16 | 36 |
| 52 | Gokalibai . . . . | 45 F | 36½ | 48½ | 41 | 89½ | 17 | 13 | 10½ | 50 | 32 | 82 | 26 | 13 | 16 |
| 53 | Shiladevi . . . . | 14 F | 26 | 49 | 34 | 83 | 16 | 14 | 10 | 24 | 73 | 97 | 78 | 15 | 41 |
| 54 | Krishnadev . . . . | 16 F | 32 | 40½ | 40 | 80½ | 16 | 11 | 10 | 42 | 31 | 73 | 11 | 13 | 5 |
| 55 | Ramdev . . . . | 18 F | 22½ | 48 | 32 | 80½ | 4 | 9 | 21½ | 42 | 35 | 77 | 34 | 13 | 20 |
| 56 | Shantakumari . . . . | 16 F | 39 | 40½ | 41½ | 88½ | 46 | 13 | 17½ | 56 | 40 | 96 | 41 | 22 | 23 |
| 57 | Svarsha Kaur . . . . | 15 F | 38 | 40 | 21½ | 71½ | 18 | 12 | 10 | 56 | 44 | 100 | 50 | 43 | 30 |
| 58 | Har Kaur . . . . | 30 F | 39 | 38½ | 47½ | 83½ | 48 | 12 | 32½ | 52 | 40 | 92 | 93 | 11 | 28 |
| 59 | Rajrani . . . . | 30 F | 38½ | 46½ | 48 | 87½ | 26 | 17 | 12½ | 42 | 47 | 89 | 29 | 14 | 15 |
| 60 | Sunde Kour . . . . | 18 F | 36 | 40½ | 47½ | 88½ | 50 | 16 | 22½ | 48 | 54 | 102 | 40 | 16 | 20 |
| 61 | Jogendra Kaur . . . . | 16 F | 38 | 38½ | 45½ | 84 | 16 | 12 | 12½ | 50 | 54 | 104 | 47 | 13 | 29 |
| 62 | Rakshadevi . . . . | 17 F | 40 | 47½ | 41 | 88½ | 42 | 13 | 30½ | 55 | 46 | 101 | 45 | 12 | 32 |
| 63 | Premlatta . . . . | 16 F | 38 | 41½ | 35½ | 77 | 20 | 13 | 11 | 49 | 32 | 81 | 25 | 12 | 15 |
| 64 | Ranjit Kaur . . . . | 23 F | 40 | 39½ | 47½ | 86½ | 58 | 14 | 22½ | 64 | 48 | 112 | 49 | 14 | 40 |
| 65 | Krishnadevi . . . . | 16 F | 34 | 40½ | 48½ | 89 | 34 | 13 | 22½ | 55 | 46 | 101 | 42 | 12 | 26 |
| 66 | Satyadevi . . . . | 16 F | 38 | 40½ | 47½ | 88 | 31 | 13 | 17½ | 56 | 50 | 106 | 42 | 12 | 27 |
| 67 | Gargidevi . . . . | 30 F | 36 | 40 | 38½ | 78½ | 34 | 13 | 20 | 41 | 46 | 87 | 37 | 13 | 24 |
| 68 | Dhanjit Kaur . . . . | 25 F | 35 | 38 | 40 | 88 | 30 | 12 | 20 | 48 | 44 | 92 | 46 | 13 | 25 |
| 69 | Gurunam Kaur . . . . | 17 F | 38½ | 33 | 34 | 67 | 55 | 12 | 12½ | 49 | 55 | 104 | 84 | 14 | 50 |
| 70 | Bhavganti . . . . | 30 F | 39 | 47 | 41 | 88 | 35 | 13 | 21 | 50 | 56 | 106 | 89 | 12 | 50 |
| 71 | Kamladevi . . . . | 17 F | 36 | 33½ | 47 | 80½ | 55 | 14 | 25 | 61 | 46 | 107 | 61 | 12 | 26 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | Kumari Sha[illegible]a . . | 22 F | 36½ | 41 | 48 | 89 | 34 | 13 | 19 | 36 | 57 | 93 | 55 | 18 | 32 |
| 73 | Romilakumari . . . . . | 18 F | 35 | 36 | 42 | 78 | 32 | 13 | 17½ | 35 | 41 | 76 | 43 | 13 | 24 |
| 74 | Sarladevi . . . . . | 22 F | 36½ | 40 | 44½ | 84½ | 19 | 13 | 10 | 49 | 50 | 99 | 64 | 14 | 36 |
| 75 | Jaydevi . . . . . | 40 F | 38 | 46½ | 35 | 81½ | 25 | 12 | 12½ | 57 | 46 | 103 | 48 | 13 | 30 |
| 76 | Diwandevi . . . . . | 41 F | 32½ | 48 | 42 | 90 | 42 | 13 | 22½ | 72 | 36 | 108 | 53 | 12 | 25 |
| 77 | Laxmidevi . . . . . | 35 F | 35 | 47 | 41 | 88 | 17 | 15 | 12½ | 53 | 48 | 101 | 67 | 13 | 40 |
| 78 | Dharmadevi . . . . . | 32 F | 31 | 41 | 48 | 89 | 58 | 17 | 26 | 49 | 54 | 103 | 51 | 14 | 32 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 7,409 | 4,607 |  |  |

Name of Parishramalaya : Abhoy Ashram (1)
Ambar Charkha Prishramalaya, Biharijuria, P. O. Chatarkanali,
Bankura, (West Bengal).

Date of starting : 16-1-56.
Charkha sets: 40

| S. No. | Name of operative | Class of Spinner. | No. of trg. days. | From 10-3-56 to 27-3-56 | | | | | | From 28-3-56 to 13-4-56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | Age sex | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding. | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Ratikant Banerji | 35 M | 66½ | 61 | 51·45 | 112·45 | 88 | 19 | 26 | 46¾ | 50¾ | 97½ | 47 | 17 | 19 |
| 2 | Bholanath Chaterji | 33 M | 72 | 55·15 | 50·30 | 105·45 | 64 | 32 | 15 | 54 | 49 | 103 | 55 | 24 | 10 |
| 3 | Gobardhan Banerji | 30 M | 63½ | 60 | 52 | 112 | 76 | 24 | 18 | 28 | 25 | 53 | 33 | 24 | 14 |
| 4 | Sibshankar Banerji | 16 M | 61½ | 62 | 11 | 73 | 25 | 22 | 10 | 44 | 42 | 86 | 31 | 18 | 13 |
| 5 | Bholanath Patru | 32 M | 74½ | 60·45 | 51·55 | 112 | 92 | 19 | 30 | 56 | 58 | 114 | 58 | 19 | 32 |
| 6 | Nandadulal Chatterji | 26 M | 23½ | 67 | 45 | 112 | 113 | 18 | 40 | 56 | 52 | 108 | 17 | 16 | 13 |
| 7 | Paran Ch. Batabyal | 26 M | 74 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8 | Subol Ch. Chaterji | 25 M | 67 | 46·15 | 69 | 115·15 | 143 | 21 | 60 | 65 | 50 | 115 | 68 | 17 | 28 |
| 9 | Bhaktadas Banerji | 20 M | 53 | 49 | 38·45 | 87·45 | 17 | 13 | 5 | 68 | 42 | 110 | 29 | 14 | 15 |
| 10 | Prafulla Kumar Roy | 26 M | 72 | 14 | 10·24 | | 15 | 19 | 13 | 61 | 26 | 87 | 26 | 15 | 20 |
| 11 | Sadanand Chaterji | 20 M | 54½ | 64·5 | 49·45 | 113·5 | 88 | 17 | 36 | 53 | 56 | 109 | 53 | 12 | 25 |
| 12 | Anirudhva Banerji | 24 M | 17½ | 48 | 25 | 73 | 39 | 24 | 15 | 41 | 42 | 83 | 29 | 21 | 11 |
| 13 | Aditya Kumar Batalaya | 32 M | 70½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 14 | Bhutnath Dey | 30 M | 54 | 58·15 | 53·10 | 111·25 | 94 | 21 | 28 | 50 | 35 | 83 | 35 | 15 | 13 |
| 15 | Ajitkumar Roy I | 19 M | 52 | .. | .. | .. | .. | .. | .. | 46 | 50 | 96 | 33 | 13 | 11 |
| 16 | Ashvinikumar Roy | 22 M | 58½ | .. | .. | .. | .. | .. | .. | 49 | 35 | 84 | 23 | 12 | 24 |
| 17 | Robilochan Tapadar | 15 M | 44 | 50·45 | 28·15 | 78·60 | 22 | 20 | 15 | 37 | 26 | 63 | 12 | 12 | 17 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Shyamalanada Chaterji | 19 M | 49½ | 33·15 | 25 | 58·15 | 17 | 18 | 5 | 20 | 12 | 32 | 9 | 16 | 8 |
| 19 | Subol Ch. Gosh | 25 M | 64½ | 35·15 | 17·30 | 52·45 | 18 | 16 | 10 | 28 | 45 | 13 | 34 | 17 | 16 |
| 20 | Ajit K. Roy II | 22 M | 20 | 62·15 | 49·5 | 111·20 | 54 | 20 | 10 | 63 | 42 | 105 | 41 | 18 | 22 |
| 21 | Govardhan Goswami | 18 M | 62 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 22 | Dayamoy Roy | 18 M | 66½ | 47 | 35·10 | 82·10 | 25 | 25 | 5 | 60 | 49 | 109 | 52 | 24 | 38 |
| 23 | Anath Bandhu Ghosal | 18 M | 46 | 56·15 | 48·5 | 104·20 | 73 | 24 | 21 | 48 | 50 | 98 | 46 | 18 | 25 |
| 24 | Satyakumar Roy | 30 M | 47 | .. | .. | .. | .. | .. | .. | 27 | 29 | 56 | 19 | 12 | 18 |
| 25 | Dugai Majhu | 18 M | 13½ | 25 | 7 | 32 | 6 | 15 | 10 | 43 | 19 | 62 | 12 | 13 | 12 |
| 26 | Sudhirkumar Roy | 32 M | 40 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 27 | Banshidhar Roy | 15 M | 53 | 40 | 17·45 | 57·45 | 16 | 17 | 10 | 54 | 37 | 91 | 16 | 17 | 8 |
| 28 | Trilochan Halder | 28 M | 57 | 49 | 55·30 | 104·30 | 106 | 25 | 20 | 45 | 50 | 95 | 49 | 18 | 13 |
| 29 | Tarapada Goveai | 18 M | 62 | 50·30 | 40 | 90·30 | 33 | 22 | 12 | 54 | 11 | 65 | 8 | 16 | 20 |
| 30 | Trilochan Roy | 15 M | 71½ | 55·15 | 33 | 88·15 | 18 | 18 | 14 | 55 | 49 | 104 | 33 | 14 | 15 |
| 31 | Panchavan Chaterji | 26 M | 22 | .. | .. | .. | .. | .. | .. | 9 | 5 | 14 | 3 | 12 | 10 |
| 32 | Kalipada Govei | 18 M | 54½ | 49·30 | 39 | 88·30 | 33 | 21 | 10 | 55 | 59 | 114 | 32 | 11 | 26 |
| 33 | Prahalad Ch. Kundoo | 20 M | 24 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 34 | Krishindas Banerji | 19 M | 46½ | 45·46 | 40·45 | 94·50 | 31 | 22 | 7 | 55 | 39 | 94 | 20 | 12 | 6 |
| 35 | Shanker Chaterji | 21 M | 48 | 44·15 | 30·30 | 74·45 | 39 | 24 | 14 | 49 | 45 | 94 | 32 | 14 | 60 |
| 36 | Sadanand Roy | 26 M | 46 | 15·30 | 29·35 | 44·65 | 35 | 20 | 13 | 53 | 41 | 94 | 27 | 17 | 6 |
| 37 | Sukumar Roy | 23 M | 71 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 38 | Gobardhan Roy | 26 M | 50 | 60·30 | 42 | 102·30 | 83 | 18 | 30 | 36 | 40 | 76 | 30 | 13 | 35 |
| 39 | Udaikumar Kundoo | 23 M | 25½ | .. | .. | .. | .. | .. | .. | 19 | 8 | 27 | 6 | 11 | 9 |
| 40 | Bhajahari Kundoo | 20 M | 55 | 58·30 | 39 | 97·30 | 40 | 22 | 10 | 51 | 44 | 95 | 29 | 14 | 31 |
| 41 | Jhanshankar Mandal | 21 M | 56 | 58 | 37 | 95 | 57 | 22 | 66 | 66 | 37 | 103 | 33 | 16 | 12 |
| 42 | Pasupati Mandal | 23 M | 12 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 43 | Shankar Paul | 22 M | 55½ | 60·45 | 56·45 | 116·90 | 45 | 20 | 12 | 59 | 47 | 106 | 28 | 16 | 26 |
| 44 | Guiram Das | 22 M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Shyamapada Roy . . | 15 M | 50½ | 47·15 | 46·45 | 93·60 | 48 | 15 | 17 | 37 | 32 | 69 | 20 | 13 | 16 |
| 46 | Sitarani Mukherji . . | 18 M | 47½ | 10·45 | 7·30 | 17·75 | 8 | 26 | 5 | 62 | 50 | 112 | 35 | 14 | 25 |
| 47 | Anjali Roy . . . . | 14 F | 16 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Mira Roy . . . . | 14 F | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 49 | Sandharai Ghosal . . | 14 M | 23½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 50 | Sukhalata Gavi . . . | 15 F | 46½ | 11 | 7·15 | 18·15 | 3 | 18 | 5 | 57 | 56 | 113 | 24 | 12 | 21 |
| 51 | Chavalmati Roy . . . | 40 F | 2½ | .. | .. |  | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 52 | Mahadev Roy . . . . | 16 M | 52½ | 45·30 | 37 | 82·30 | 28 | 20 | 6 | 50 | 47 | 97 | 28 | 14 | 24 |
| 53 | Nandulal Roy . . . . | 20 M | 17 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 54 | Madanmohan Singh . . | 16 M | 45½ | 50 | 57 | 107 | 89 | 28 | 24 | 45 | 28 | 73 | 28 | 20 | 11 |
| 55 | Haba Routh . . . . | 17 M | 53½ | 54 | 41 | 95 | 68 | 24 | 14 | 51 | 38 | 89 | 34 | 18 | 5 |
| 56 | Dulal Chandra Das . . | 16 M | 22 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 57 | Kanhyalal Chaterji . . | 30 M | 16 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 58 | Sudhakar Banerji . . | 18 M | 55 | 50 | 47·20 | 97·20 | 43 | 15 | 15 | 61 | 48 | 109 | 30 | 15 | 19 |
| 59 | Mayapada Mandal . . | 17 M | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 60 | Gurchandra Misra . . | 32 M | 7½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 61 | Durga Ch. Ghosh . . | 18 M | 10 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 62 | Ganesh Ch. Saini . . | 20 M | 16½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 63 | Bishwanath Saini . . | 17 M | 45½ | 70 | 31 | 101 | 34 | 19 | 15 | 68 | 29 | 97 | 19 | 12 | 2 |
| 64 | Haripada Sheth . . | 20 M | 42½ | 49 | 27 | 76 | 30 | 19 | 13 | 53 | 23 | 76 | 17 | 12 | 13 |
| 65 | Guiram Jarai . . . . | 19 M | 42 | 50·15 | 36·45 | 86·60 | 33 | 20 | 16 | 56 | 46 | 102 | 27 | 12 | 24 |
| 66 | Gangadhar Bauri . . | 16 M | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 67 | Fatick Ch. Roy . . . | 24 M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
|  | TOTAL . |  |  |  |  |  |  |  |  |  |  | 4035 | 140 | 9 | .. |

Name of Parishramalaya : Shikshanalaya ( )
Arunghata (dt. Nadia—W. Bengal)

Date of starting 28-11-55
Class of operative : all new
Charkha sets 40

| S.No. | Name of operative | Class of spinner | | From 10th Mar. 56 to 27th Mar., 56 Duration of work (hours) | | | | | | From 28th Mar. to 13th Apl., 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age sex | No. of days of trg. | Carding | Spg. | Total | Prod. hanks. | Counts. | Loss tolas | Card-ing | Spg. | Total | Prodn. hanks | Counts | Loss tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Belarani Sha . . . . | 28 F | 74 | 34 | 30 | 64 | 26 | 16 | 8½ | 29 | 19 | 39 | 14 | 16 | 11 |
| 2 | Binedine Nath . . . | 26 F | 105 | 55 | 65 | 120 | 73 | 17 | 29½ | 45 | 51 | 96 | 90 | 20 | 22½ |
| 3 | Sailabala Sutradhar . . | 32 F | 93½ | 52¼ | 63¼ | 115½ | 38 | 15 | 29 | 51½ | 55 | 106½ | 37 | 17 | 14 |
| 4 | Ganesh Chakrabarty . . | 14 M | 96 | 25 | 39 | 64 | 37 | 16 | 15 | 53½ | 66½ | 120 | 109 | 18 | 17 |
| 5 | Suniti Haldar . . . | 22 F | 93 | 49 | 17 | 120 | 80 | 18 | 27 | 54 | 65 | 119 | 94 | 18 | 14½ |
| 6 | Malti Deonath . . . | 22 F | 104 | 47¾ | 72¼ | 120 | 80 | 17 | 29 | 57½ | 59½ | 117 | 93 | 17 | 26 |
| 7 | Pujadashi Pal . . . | 37 F | 95½ | 34½ | 65½ | 100 | 47 | 13 | 20 | 44½ | 62½ | 107 | 61 | 12 | 17½ |
| 8 | Kanarani Devnath . . | 14 F | 97 | 44½ | 75½ | 120 | 100 | 19 | 21½ | 54 | 56½ | 110½ | 109 | 20 | 20 |
| 9 | Ahlya Haldar . . . | 23 F | 78 | 41 | 47 | 88 | 37 | 17 | 11½ | 53 | 63 | 116 | 66 | 16 | 19¾ |
| 10 | Renubala Majumdar . . | 27 F | 70 | 29¾ | 36¼ | 66 | 32 | 16 | 22½ | 55 | 62 | 117 | 74 | 16 | 28 |
| 11 | Suntabala Pal . . . | 30 F | 80 | 47½ | 72¾ | 120¼ | 65 | 16 | 27 | 55½ | 63½ | 119 | 76 | 16 | 28 |
| 12 | Nirmala Shah. . . . | 14 F | 79 | 76½ | 43½ | 120 | 53 | 20 | 20½ | 52½ | 65 | 117½ | 71 | 18 | 60 |
| 13 | Farmila Das . . . . | 14 F | 78 | 47½ | 71½ | 119 | 35 | 16 | 22¾ | 40 | 58½ | 126½ | 44 | 16 | 9 |
| 14 | Nandrani Biswas . . . | 11 F | 76 | 49½ | 70¼ | 119¾ | 39 | 14 | 16 | 36 | 52 | 24 | 24 | 17 | 25 |
| 15 | Laxmirani Sarkar . . . | 19 F | 71 | 56½ | 54½ | 112 | 67 | 17 | 30 | 30 | 15 | 45 | 12 | 17 | 7½ |
| 16 | Shakti Devi Chattopadhaya . | 39 F | 76½ | 39¾ | 80¼ | 120 | 60 | 16 | 13½ | 57½ | 63½ | 121 | 72 | 16 | 26 |
| 17 | Yuguldasi Saha . . . | 26 F | 74 | 44½ | 75½ | 120 | 50 | 16 | 16½ | 56 | 61 | 117 | 61 | 15 | 24 |
| 18 | Punyabala Das . . . | 25 F | 68 | 49 | 63 | 112 | 41 | 16 | 20 | 57½ | 54½ | 112 | 59 | 17 | 19 |
| 19 | Gobinda Majumdar . . | 17 M | 46 | 35 | 37 | 72 | 3 | 12 | 7½ | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | Charubala Bagadi | 40 F | 62½ | 38½ | 69½ | 108 | 42 | 16 | 23 | 50 | 63 | 113 | 59 | 16 | ½ |
| 21 | Radharani Kundu | 15 F | 64 | 50 | 70 | 120 | 55 | 16 | 20 | 57¼ | 63¾ | 117 | 81 | 20 | 21½ |
| 22 | Laxmirani Roy | 11 F | 61 | 57½ | 50½ | 100 | 25 | 16 | 20 | 40½ | 43½ | 84 | 29 | 16 | 12 |
| 23 | Sudarshan Sen | 15 M | 55 | 38½ | 32 | 70½ | 18 | 13 | 17 | 49 | 51 | 100 | 35 | 16 | 33 |
| 24 | Makhanlal Das | 26 M | 31 | 9 | 13 | 22 | 4 | 12 | 2 | .. | .. | .. | .. | .. | .. |
| 25 | Sushanta Datt | 16 F | 58½ | 48½ | 61½ | 110 | 46 | 16 | 18½ | 45 | 50 | 95 | 53 | 17 | 14 |
| 26 | Avani Vishwas | 17 M | 44½ | 42 | 62 | 104 | 24 | 15 | 15 | .. | .. | .. | .. | .. | .. |
| 27 | Nirmala Adhikari | 28 F | 37 | 21 | 27 | 48 | 9 | 12 | 8 | .. | .. | .. | .. | .. | .. |
| 28 | Bagirath Vishwas | 17 M | 50 | 59 | 60 | 119 | 23 | 15 | 17 | 49½ | 53½ | 103 | 24 | 19 | 21 |
| 29 | Paranchandra Devnath | 21 M | 35 | 42 | 41 | 83 | 20 | 13 | 9¼ | 60½ | 56½ | 117 | 3 | 14 | 25 |
| 30 | Geetarani Datta | 9 F | 18 | 30½ | 41½ | 72 | 10 | 14 | 2 | .. | .. | .. | .. | .. | .. |
| 31 | Pankajini Chakrabarti | 38 F | 38 | 25¼ | 28¼ | 54 | 9 | 14 | 1½ | 50 | 29 | 59 | 14 | 14 | 10½ |
| 32 | Shantilata Saha | 13 F | 35 | 44½ | 51½ | 96 | 21 | 14 | 17½ | 50½ | 55¾ | 106¼ | 40 | 17 | 26½ |
| 33 | Lalmohan Talukdar | 20M | 37 | 52½ | 50½ | 111 | 37 | 16 | 14 | 48½ | 60 | 108½ | 54 | 14 | 8½ |
| 34 | Pramedranjan Viswas | 13M | 33½ | 49½ | 49½ | 99 | 55 | 16 | 9¼ | 48 | 44 | 92 | 75 | 18 | 17 |
| 35 | Basanti Roy | 11 F | 27½ | 53 | 51 | 104 | 25 | 16 | 15¼ | 17 | 21½ | 38½ | 12 | 16 | 17 |
| 36 | Jyetsna Mandal | 12 F | 37 | 48¾ | 55½ | 104¼ | 15 | 16 | 16½ | 59 | 55 | 112 | 32 | 15 | 4 |
| 37 | Bilwamangal Devi | 32 F | 38 | 28½ | 27½ | 56 | 9 | 13 | 8½ | 24 | 36 | 60 | 15 | 15 | 26 |
| 38 | Naresh Chandra Roy | 25 F | 36 | 38½ | 57½ | 96 | 43 | 18 | 23½ | 50 | 70 | 120 | 90 | 17 | 11½ |
| 39 | Arati Deonath | 12 F | 38 | 59 | 61 | 120 | 31 | 14 | 22¼ | 49½ | 60½ | 110 | 40 | 16 | 13 |
| 40 | Sumati Adhikari | 40 F | 37 | 55 | 65 | 120 | 27 | 15 | 23½ | 37½ | 65½ | 103 | 20 | 13 | 18½ |
| 41 | Amala Kunda | 18 F | 39 | 52 | 68 | 120 | 25 | 12 | 22½ | 50½ | 69 | 119½ | 37 | 14 | 20 |
| 42 | Reena Biswas | 13 F | 39 | 55½ | 64½ | 120 | 33 | 15 | 19¾ | 55 | 64½ | 119½ | 37 | 14 | 30 |
| 43 | Beena Biswas | 15 F | 38 | 50½ | 61½ | 112 | 19 | 16 | 15½ | 55½ | 64½ | 120 | 28 | 15 | 19½ |
| 44 | Bhajana Modak | 12 F | 39 | 53½ | 62 | 115½ | 16 | 16 | 9½ | 53½ | 59 | 112½ | 40 | 17 | 22½ |
| 45 | Phanindra Sarkar | 18M | 19 | 36½ | 43½ | 80 | 24 | 13 | 18 | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | 3973¾ | 2026 | | |

Name of Parishramalaya: Nazirbazar, (West Bengal). Date of starting 17-2-56

| S. No. | Name of Operative | Class of Spinner<br>Age | No. of days of Trg. | From 10th March 56 to 27th March 56<br>Duration of work (Hours)<br>Carding | Sng. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March 56 to 13th April 56<br>Duration of work (Hours)<br>Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Paritosh Pradhan | 24 | 69 | 56 | 64 | 120 | 75 | 18 | 30 | 60 | 60 | 380 | 96 | 18 | 25 |
| 2 | Shusilkumar Maitry | 21 | 60 | 64 | 56 | 120 | 31 | 17 | 20 | 31 | 69 | 120 | 90 | 16 | 30 |
| 3 | Sodamani Maitry | 20 | 64 | 56 | 64 | 120 | 35 | 18 | 20 | 56 | 65 | 120 | 51 | 16 | 10 |
| 4 | Anjali Bera | 16 | 67 | 56 | 64 | 120 | 40 | 14 | 25 | 68 | 52 | 120 | 31 | 15 | 18 |
| 5 | Sarojkumara Maitry | 19 | 65 | 56 | 64 | 120 | 55 | 16 | 25 | 44 | 52 | 96 | 49 | 19 | 15 |
| 6 | Sudhirkumar Maitry | 25 | 69 | 56 | 64 | 120 | 52 | 16 | 25 | 72 | 48 | 120 | 60 | 18 | 20 |
| 7 | Bhabhar Haran Dhara | 42 | 68 | 56 | 56 | 112 | 38 | 16 | 20 | 56 | 64 | 120 | 61 | 14 | 20 |
| 8 | Bhairavchandra Sov | 27 | 67 | 56 | 64 | 120 | 39 | 16 | 30 | 54 | 86 | 120 | 105 | 12 | 30 |
| 9 | Sabadirchandra Mandal | 122 | 65 | 64 | 56 | 120 | 45 | 16 | 20 | 54 | 66 | 120 | 75 | 16 | 21 |
| 10 | Subodhobanchra Dass | 24 | 64 | 56 | 64 | 120 | 57 | 16 | 30 | 40 | 40 | 80 | 46 | 15 | 15 |
| 11 | Dhanapati Manna | 24 | 69 | 64 | 56 | 120 | 36 | 20 | 20 | 64 | 56 | 120 | 120 | 18 | 20 |
| 12 | Santoshkumar Bag | 22 | 69 | 63 | 67 | 130 | 63 | 16 | 30 | 58 | 62 | 120 | 114 | 18 | 40 |
| 13 | Maritujoy Roy | 43 | 68 | 56 | 64 | 120 | 58 | 16 | 30 | 60 | 60 | 120 | 60 | 14 | 20 |
| 14 | Bhagwati Roy | 17 | 69 | 56 | 64 | 120 | 49 | 16 | 30 | 52 | 68 | 120 | 96 | 16 | 25 |
| 15 | Rajbala Muzamdar | 23 | 69 | 56 | 64 | 120 | 56 | 16 | 30 | 54 | 66 | 120 | 61 | 16 | 35 |
| 16 | Khudiram Mandal | 28 | 67 | 56 | 64 | 130 | 68 | 18 | 20 | 60 | 60 | 120 | 90 | 15 | 25 |
| 17 | Ramkrishna Maitry | 27 | 65 | 48 | 56 | 104 | 34 | 12 | 20 | 60 | 60 | 120 | 61 | 14 | 20 |
| 18 | Prahladchandra Mandal | 22 | 66 | 52 | 60 | 112 | 43 | 16 | 20 | 60 | 60 | 120 | 75 | 16 | 20 |
| 19 | Surendranath Gayee | 28 | 68 | 64 | 56 | 120 | 53 | 114 | 30 | 54 | 56 | 110 | 105 | 16 | 35 |
| 20 | Barendranath Gayee | 22 | 68 | 62 | 58 | 120 | 53 | 16 | 30 | 40 | 80 | 120 | 90 | 14 | 30 |
| 21 | Girishchandra Dalai | 28 | 61 | 56 | 64 | 120 | 56 | 18 | 35 | 50 | 70 | 120 | 100 | 16 | 30 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | Nagendranath Gayee | 28 | 61 | 56 | 64 | 120 | 52 | 14 | 25 | 64 | 56 | 120 | 64 | 16 | 20 |
| 23 | Jaladhi Bera | 19 | 35 | 24 | 48 | 72 | 23 | 14 | 15 | .. | .. | .. | .. | .. | .. |
| 24 | Arya Bera | 25 | 58 | 64 | 56 | 120 | 66 | 18 | 20 | 48 | 48 | 96 | 60 | 15 | 15 |
| 25 | Rajlaxmi Roy | 17 | 60 | 56 | 56 | 112 | 29 | 14 | 15 | 54 | 66 | 120 | 90 | 16 | 25 |
| 26 | Eiranbala Bhunia | 36 | 51 | 54 | 56 | 120 | 42 | 18 | 15 | 20 | 20 | 40 | 19 | 14 | 8 |
| 27 | Govinda Sha | 20 | 61 | 54 | 56 | 110 | 67 | 16 | 35 | 54 | 56 | 110 | 105 | 16 | 30 |
| 28 | Amarendranath Bhunia | 25 | 61 | 56 | 64 | 120 | 54 | 18 | 25 | 50 | 70 | 120 | 105 | 14 | 30 |
| 29 | Praffulkumar Bhunia | 28 | 58 | 64 | 56 | 120 | 47 | 15 | 15 | 48 | 48 | 96 | 63 | 16 | 18 |
| 30 | Muktakshi Pradhan | 29 | 58 | 56 | 64 | 120 | 33 | 15 | 15 | .. | .. | .. | .. | .. | .. |
| 31 | Tejaskar Mandal | 24 | 57 | 64 | 56 | 120 | 45 | 19 | 15 | 54 | 66 | 120 | 90 | 16 | 22 |
| 32 | Sudhirchandra Jana | 24 | 57 | 56 | 64 | 120 | 62 | 15 | 25 | 56 | 64 | 120 | 90 | 16 | 23 |
| 33 | Rasana Bera | 36 | 57 | 54 | 56 | 120 | 52 | 17 | 20 | 54 | 66 | 120 | 51 | 14 | 20 |
| 34 | Sharatchandra Mandal | 25 | 56 | 56 | 56 | 112 | 44 | 17 | 15 | 50 | 70 | 120 | 45 | 13 | 15 |
| 35 | Khagendra Bera | 40 | 53 | 48 | 48 | 96 | 24 | 16 | 10 | 50 | 62 | 112 | 32 | 16 | 10 |
| 36 | Monaranjan Manna | 26 | 56 | 56 | 56 | 112 | 31 | 14 | 10 | 56 | 64 | 120 | 60 | 15 | 20 |
| 37 | Santeshkumar Jana | 27 | 56 | 64 | 56 | 120 | 39 | 14 | 15 | 50 | 62 | 112 | 60 | 16 | 30 |
| 38 | Prakashohandra Bera | 24 | 57 | 64 | 56 | 120 | 34 | 13 | 15 | 56 | 64 | 120 | 61 | 18 | 19 |
| 39 | Prabhatkumar Dass | 24 | 57 | 64 | 66 | 130 | 53 | 17 | 15 | 50 | 70 | 124 | 124 | 16 | 30 |
| 40 | Amulya Ratan Bera | 28 | 57 | 66 | 64 | 130 | 95 | 16 | 35 | 50 | 70 | 120 | 106 | 16 | 30 |
| 41 | Surendranath Roy | 48 | 18 |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Krishnapada Bera | 24 | 57 | 30 | 30 | 60 | 26 | 14 | 10 | 30 | 30 | 60 | 54 | 14 | 20 |
| 43 | Pushpa Ranjan Bera | 24 | 40 | 28 | 24 | 52 | 28 | 16 | 10 | .. | .. | .. | .. | .. | .. |
| 44 | Kirankala Manna | 40 | 12 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 45 | Bijaykrishna Mandal | 28 | 24 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 46 | Dhirendranath Gwia | 20 | 6 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 47 | Haripada Roy | 27 | 18 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Santoshkumar Sasmal | 20 | 51 | 30 | 30 | 60 | 28 | 16 | 10 | 34 | 26 | 60 | 59 | 16 | 25 |
| 49 | Abantikumar Maitry | 15 | 39 | 30 | 30 | 60 | 28 | 16 | 13 | 30 | 30 | 60 | 52 | 16 | 25 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 4,512 | 3,043 |  |  |

Name of Parishramalaya: Katranka Dt. Midnpur, (West Bengal).

Date of startıng 17-2-56
No. of Charkha sets 20

| S. No. | Name of Operative | Class of Spinner Age Sex | No. of days of Trg. | From 10th March, 56 to 27th March, 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March 56 to 13thA pril, 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Swedesh Rayan Sasmal | 22M Old | 46½ | 56 | 56 | 112 | 50 | 17 | 20 | 60 | 56 | 116 | 92 | 15 | 20 |
| 2 | Nirmala Samanta | 33F Old | 48 | 60 | 60 | 120 | 42 | 16 | 14 | 60 | 60 | 120 | 56 | 17 | 26 |
| 3 | Jyotsana Rani Das | 13F Old | 44½ | 60 | 60 | 120 | 41 | 16 | 14 | 60 | 56 | 116 | 47 | 16 | 20 |
| 4 | Bithika Rani | 13F Old | 42 | 40 | 44 | 84 | 17 | 15 | 15 | 60 | 56 | 116 | 31 | 14 | 24½ |
| 5 | Puspa Rani Das | 13F Old | 39 | 52 | 56 | 108 | 24 | 16 | 18 | 44 | 40 | 84 | 26 | 16 | 11½ |
| 6 | Bina Rani Patnayak | 15F Old | 38 | 60 | 60 | 120 | 30 | 20 | 20 | 60 | 60 | 120 | 45 | 20 | 14 |
| 7 | Janki Rani Das | 21F Old | 40½ | 60 | 56 | 116 | 40 | 16 | 25 | 40 | 44 | 84 | 37 | 16 | 9 |
| 8 | Shanta Bala Jain | 18F Old | 43½ | 60 | 60 | 120 | 57 | 15 | 20 | 48 | 44 | 92 | 44 | 14 | 29½ |
| 9 | Sharma Rani Jana | 22F Old | 46½ | 60 | 60 | 120 | 46 | 15 | 30 | 60 | 60 | 120 | 83 | 14 | 17 |
| 10 | Uma Rani Maithi | 20F Old | 48 | 60 | 60 | 120 | 49 | 18 | 12 | 60 | 60 | 120 | 63 | 16 | 22 |
| 11 | Anant Kumar Maithi | 19M Old | 47 | 60 | 60 | 120 | 56 | 15 | 18 | 60 | 60 | 120 | 71 | 14 | 32 |
| 12 | Radha Nath Pradhan | 35M Old | 44½ | 60 | 60 | 120 | 54 | 16 | 16 | 60 | 60 | 120 | 66 | 16 | 29 |
| 13 | Purna Chandra Patrn | 24M Old | 44 | 60 | 60 | 120 | 57 | 18 | 20 | 60 | 60 | 120 | 95 | 16 | 15½ |
| 14 | Laxman Kumar Maithi | 22M Old | 45 | 60 | 60 | 120 | 55 | 16 | 41 | 60 | 60 | 120 | 96 | 16 | 31½ |
| 15 | Gunadhar Bag | 24M Old | 42 | 56 | 56 | 112 | 17 | 17 | 17 | 56 | 56 | 112 | 56 | 19 | 22 |
| 16 | Vivekanand Patnayak | 24M Old | 41½ | 60 | 60 | 120 | 42 | 15 | 35 | 44 | 40 | 84 | 55 | 19 | 23 |
| 17 | Harekrishna Rai Chowdhury | 38M Old | 45½ | 60 | 56 | 116 | 25 | 12 | 20 | 60 | 60 | 120 | 24 | 12 | 10 |
| 18 | Prabhat Kumar Roy | 22M Old | 45 | 56 | 56 | 112 | 56 | 18 | 25 | 60 | 60 | 120 | 83 | 14 | 28 |
| 9 | Haripad Samant | 20M Old | 45½ | 60 | 56 | 112 | 652 | 16 | 40 | 60 | 60 | 120 | 73 | 14 | 52 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | Sudhir C handra Jana . . . | 24M Old | 45½ | 60 | 60 | 120 | 52 | 16 | 40 | 60 | 56 | 116 | 73 | 14 | 15 |
| 21 | Radhakrishana Maithi . . . . . | 24M Old | 43 | 56 | 52 | 108 | 39 | 18 | 25 | 60 | 56 | 116 | 39 | 18 | 22 |
| 22 | Amluya Rattan Maithi . . . | 25M Old | 41½ | 56 | 48 | 104 | 39 | 18 | 21 | 60 | 48 | 108 | 38 | 16 | 16 |
| 23 | Laxmi Narain Gore . . . . | 21M Old | 46 | 60 | 60 | 120 | 48 | 15 | 20 | 60 | 60 | 120 | 89 | 15 | 36½ |
| 24 | Ishudhiram Dinsha . . . . | 22M Old | 46 | 60 | 60 | 120 | 49 | 15 | 20 | 60 | 60 | 120 | 102 | 15 | 35 |
| 25 | Nimecharan Randya . . . | 26M Old | 46 | 60 | 60 | 120 | 39 | 18 | 20 | 60 | 60 | 120 | 35 | 16 | 21 |
| 26 | Vaneshwari Maithi . . . . | 26 M Old | 45 | 60 | 60 | 120 | 30 | 16 | 12 | 60 | 60 | 120 | 54 | 15 | 17 |
| 27 | Taraba Mathi . . . . . | 33M Old | 44 | 64 | 56 | 120 | 30 | 14 | 15 | 56 | 56 | 112 | 39 | 13 | 22 |
| 28 | Jaikri shna Maithi . . . . . | 25M Old | 46 | 56 | 64 | 120 | 40 | 14 | 25 | 60 | 60 | 120 | 51 | 15 | 24 |
| 29 | Nagend Nath Giri . . . . | 36 M Old | 42 | 48 | 56 | 104 | 26 | 15 | 10 | 60 | 60 | 120 | 41 | 12 | 17½ |
| 30 | Veeranand Dass . . . . | 39(M) | 44 | 66 | 54 | 120 | 30 | 15 | 15 | 60 | 60 | 120 | 64 | 13 | 35 |
| 31 | Madhusudan Das . . . . | 26M Old | 39 | 52 | 52 | 104 | 37 | 14 | 20 | 48 | 48 | 96 | 41 | 14 | 29 |
| 32 | Sathish Chandra Maithi . . . | 22M Old | 31½ | 56 | 52 | 108 | 40 | 15 | 13 | 56 | 60 | 116 | 61 | 16 | 29 |
| 33 | Nikhil Ranjan Sen . . . . | 20M Old | 37 | 48 | 48 | 96 | 26 | 14 | 16 | 60 | 60 | 120 | 64 | 14 | 20 |
| 34 | Sunil Kumar Chanda . . . | 23M Old | 40 | 68 | 52 | 120 | 26 | 13 | 15 | 60 | 60 | 120 | 34 | 13 | 34½ |
| 35 | Ganesh Chandra Adhak . . . | 16M Old | 40 | 60 | 60 | 120 | 40 | 15 | 18 | 60 | 60 | 120 | 44 | 14 | 34½ |
| 36 | Satish Chandra Adhak . . . | 16 M Old | 40 | 60 | 60 | 120 | 40 | 14 | 20 | 60 | 60 | 120 | 46 | 14 | 19 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 4108 | 2065 |  |  |

Name of Parishramalaya : Ambar Parishramalaya, Mangalagiri, District Guntur. (ANDHRA)

Date of starting 9th January, 1956.

| S. No. | Name of Operative | Class of spinner | No. of days of attendance | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hrs) | | | | | | Duration of work (hrs) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Ganji Venkataravana | 30 F | 73 | 22½ | 41½ | 64 | 26 | 13—18 | 21 | 34½ | 54 | 88½ | 63 | 13—18 | 36 |
| 2 | Panidappu Rajalaxamma | 35 F | 68 | 29 | 31 | 60 | 21 | 12—15 | 10 | 37 | 50½ | 87½ | 38 | 12—15 | 24 |
| 3 | Parvathamma | 20 F | 73 | 34 | 47 | 81 | 24 | 12—15 | 21 | 35 | 51½ | 86½ | 34 | 12—15 | 26 |
| 4 | Ganji Sithamma Laxmi | 25 F | 48 | 6½ | 7½ | 14 | 5 | 12—15 | .. | 8 | 11 | 19 | 8 | 12—15 | 4 |
| 5 | Ganji Sithamma | 40 F | 68 | 31 | 52 | 52 | 16 | 12—15 | 14 | 27½ | 28½ | 56½ | 21 | 12—15 | 15 |
| 6 | Jothradul Koteswaralu | 20 M | 52 | 18 | 4 | 22 | 2 | 15—18 | 3 | 2 | 4 | 6 | 2 | 15—18 | .. |
| 7 | Kotali Venkateswaraly | 35 M | 20 | 6 | 4 | 10 | 2 | 18—20 | 3 | .. | .. | .. | .. | .. | .. |
| 8 | Kunnerla Nageswara Rao | 19 M | 72 | 30 | 55 | 85 | 44 | 18—20 | 17 | 37 | 60 | 97 | 97 | 12—20 | 31 |
| 9 | Vasi Reddy Akilanramma | 45 M | 64 | 24 | 38 | 62 | 22 | 15—18 | 28 | 44½ | 56 | 100½ | 53 | 15—18 | 31 |
| 10 | Injavarpu Iswaramma | 45 M | 61 | 26½ | 27 | 53½ | 11 | 15—18 | 10 | 27 | 29 | 56½ | 18 | 15—18 | 11 |
| 11 | Panithapu Venkaiasubbamma | 45 M | 72 | 44½ | 61 | 105½ | 59 | 15—18 | 38 | 46½ | 61½ | 108½ | 79 | 15—18 | 60 |
| 12 | Adigopul Seshathamma | 30 F | 72 | 47 | 57 | 104 | 54 | 15—18 | 45 | 47½ | 58 | 105½ | 81 | 15—18 | 60 |
| 13 | Joshi Vasantasayamma | 40 F | 54 | 29 | 18 | 47 | 7 | 15—18 | 7 | 10 | 12 | 22 | 7 | 15—18 | 4 |
| 14 | Ganji Sivaramakrishna | 22 M | 56 | 47½ | 51 | 98½ | 26 | 15—18 | 21 | 21½ | 17 | 38½ | 11 | 15—18 | 7 |
| 15 | Kamtra Venkatasubbamma | 45 F | 41 | 13 | 7 | 20 | 4 | 15—18 | 4 | 43 | 51½ | 94½ | 41 | 15—18 | 30 |
| 16 | Gunti Sivamma | 45 F | 74 | 25½ | 40½ | 66 | 27 | 15—18 | 21 | 40 | 49 | 89½ | 42 | 15—18 | 28 |
| 17 | Tiruvikula Nagamalleswaramma | 19 F | 57 | 20 | 26 | 46 | 18 | 15—18 | 10 | 36 | 42 | 78 | 37 | 15—18 | 28 |
| 18 | Jolladulla Iswaramma | 45 F | 47 | 3 | 6 | 9 | 2 | 15—18 | .. | 33 | 36 | 69 | 25 | 15—18 | 14 |
| 19 | Jolladdulla Sitharamma | 19 F | 43 | 4 | 3 | 7 | 1 | 15—18 | .. | 9½ | 5 | 14½ | 2 | 15—18 | 7 |
| 20 | Bitra Kanakamma | 35 F | 70 | 20 | 31 | 51 | 18 | 15—18 | 14 | 34½ | 40½ | 75 | 45 | 15—18 | 30 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | Bitra Besawamma | 30 F | 45 | 21½ | 18 | 39½ | 8 | 16—18 | .. | 19½ | 22½ | 42 | 17 | 15—18 | 14 |
| 22 | Penikamala Anjamma | 32 F | 63 | 26½ | 25½ | 52 | 16 | 15—18 | 14 | 38 | 487 | 85 | 37 | 15—18 | 28 |
| 23 | Banithatu Ramasithamma | 30 F | 66 | 45½ | 41 | 85½ | 20 | 15—18 | 14 | 33½ | 36 | 69½ | 29 | 15—18 | 12 |
| 24 | Poturu Sathiavathi | 25 F | 67 | 37½ | 46½ | 84 | 29 | 15—18 | 17 | 46 | 57 | 103 | 50 | 15—18 | 30 |
| 25 | Shdepalle Harinatha Baburao | 20 M | 60 | 36 | 39 | 15 | 22 | 12—15 | 10 | 42 | 50½ | 92½ | 12 | 15—48 | 16 |
| 26 | Chitrakavi Laxmamma | 45 F | 36 | 37½ | 38 | 75½ | 18 | 12—15 | 17 | 28 | 35½ | 63½ | 29 | 12—15 | 14 |
| 27 | Nandivaluku Saraswathamma | 45 F | 47 | 40 | 33 | 75 | 8 | 12—15 | 10 | 20½ | 21 | 41½ | 12 | 12—15 | 3 |
| 28 | Parepallo Kesava Rao | 21 M | 45 | 20½ | 14 | 34½ | 15 | 12—15 | 7 | 29 | 42 | 71 | 39 | 12—15 | 10 |
| 29 | Sishta Padmavathi | 25 F | 66 | 42 | 62½ | 104½ | 89 | 12—120 | 63 | 63 | 63 | 105 | 125 | 12—20 | 91 |
| 30 | Ganesarpu Venkats Laxmma | 30 F | 46 | 17 | 4½ | 21½ | 1 | 12—15 | 7 | 25 | 34 | 59 | 23 | 12—15 | 10 |
| 31 | Kunta Laxminarasamma | 45 F | 56 | 41½ | 40½ | 82 | 19 | 12—15 | 17 | 27½ | 37½ | 65 | 31 | 12—15 | 18 |
| 32 | Smt. Kannumantha Rao | 35 F | 63 | 40½ | 48 | 80½ | 30 | 12—15 | 342 | 41 | 46 | 87 | 50 | 12—15 | 21 |
| 33 | Smt. Kaneswari | 30 F | 63 | 40 | 51 | 91 | 28 | 12—15 | 3 | 40½ | 52 | 92½ | 54 | 12—15 | 25 |
| 34 | Gotipukkal Ramajamma | 40 F | 52 | 44½ | 39 | 83½ | 25 | 12—15 | 14 | 38 | 50½ | 88½ | 43 | 12—15 | 22 |
| 35 | Nanduri Aliveli Mangamma | 45 F | 42 | 22 | 35 | 57 | 11 | 12—15 | 7 | 732 | 64½ | 12 | 12 | 12—15 | 10 |
| 36 | Paramathmmi Brahmarambha | 22 F | 60 | 42 | 53 | 95 | 36 | 12—15 | 24 | 32 | 51½ | 81½ | 51 | 12—18 | 3 |
| 37 | Ravi Tulasima | 29 F | 50 | 44½ | 56 | 100½ | 50 | 12—15 | 35 | 44 | 60½ | 104½ | 73 | 12—18 | 42 |
| 38 | Vaka Venkatasubhamma | 35 F | 60 | 38 | 36 | 74 | 16 | 12—15 | 10 | 31½ | 42 | 73½ | 28 | 12—18 | 17 |
| 39 | Allada Boohamma | 20 F | 53 | 40½ | 44 | 84½ | 24 | 12—198 | 17 | 22 | 45 | 32 | 23 | 12—18 | 17 |
| 40 | Pagvathul Meenakshamma | 40 F | 48 | 30 | 40 | 70 | 33 | 12—18 | 21 | 30 | 427 | 72½ | 94 | 12—18 | 28 |
| 41 | Homuri Iswarachari | 25 F | 41 | 25½ | 6 | 31½ | 3 | 8—12 | 3 | 4½ | ½ | 11½ | 5 | 9—12 | 3 |
| 42 | Pramathmuni Anusayamma | 35 F | 51 | 40 | 32 | 72 | 13 | 8—12 | 3 | 22 | 22½ | 44½ | 18 | 9—12 | 10 |
| 43 | Vidavolu Sathyavathy | 25 F | 62 | 41 | 46 | 87 | 25 | 12—15 | 21 | 40 | 52½ | 92½ | 50 | 12—15 | 38 |
| 44 | Kalepu Suryanarayanmbrhty | 22 M | 49 | 26½ | 16 | 42½ | 8 | 12—15 | 14 | 26 | 25 | 61 | 17 | 12—15 | 14 |
| 45 | Paramathumuni Varkatanarasimba | 40 M | 53 | 25 | 34 | 59 | 15½ | 12—15 | 10 | 33 | 39 | 51 | 17 | 12—15 | 15 |
| 46 | Smaraju Hanumantha Rao | 23 M | 53 | 34 | 40 | 74 | 27 | 12—15 | 21 | 28½ | 26½ | 55 | 17½ | 12—15 | 10 |
| 47 | Paramathma Sitheramayya | 20 M | 41 | 13 | .. | .. | .. | 12—15 | 20 | 13½ | 35½ | 49 | .. | .. | .. |
| 48 | Kollipar Raghavamma | 40 F | 33 | 13 | 13 | 14 | 6 | .. | .. | 14 | 16½ | 30½ | 14 | 12—15 | 14 |
| 49 | Dassiasm Ranganayakamma | 35 F | 52 | 36 | 49 | 85 | 35 | 12—15 | 21 | 37 | 46½ | 83½ | 46 | 12—15 | 31 |
| 50 | Chiruvelu Jayapradamma | 24 F | 39 | 27 | 29½ | 56½ | 11 | 12—15 | 10 | 27 | 36½ | 63½ | 27 | 12—15 | 14 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 3246 | 1756 |  |  |

Ambar Parishramalaya, Kandukur (ANDHRA)

Date of starting 26th January 1956.
Number of Charkha sets : 40

| | Name of Operative | Class of Spinner | No. of days of Training | From 10th March 56 to 27th March 56 Duration of work (Hours) | | | | | | From 28th March 56 to 13th April 56. Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | K. Brahmrish | 35 M | 64 | 66½ | 16½ | 83 | 47 | 13 | 47 | 54½ | 12½ | 67 | 48 | 13 | 25 |
| 2 | K. Cholumiah | 45 M | 59 | 65½ | .. | 80½ | 18·1 | 10 | 17 | 36 | 120 | 1;6 | 16 | 10 | 10 |
| 3 | N. Kondmiah | 26 M | 68 | 65½ | 16½ | 82 | 29 | 13 | 29 | 62 | 21½ | 83½ | 42 | 13 | 82 |
| 4 | N. Ch. Naraimahan | 18 M | 27 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 9 |
| 5 | N. P. Haraimahan | 45 M | 60 | 42 | 7 | 49 | 10 | 12 | 10 | 60 | 20½ | 80½ | 29 | 12 | 329 |
| 6 | N. Subhaiya | 30 M | 63 | 58½ | 16½ | 75 | 26 | 13 | 26 | 58 | 23 | 81 | 41 | 13 | 81 |
| 7 | M. Rajaiya | 30 M | 66 | 61 | 14 | 75 | 20 | 13 | 20 | 54½ | 21½ | 76 | 39 | 13 | 39 |
| 8 | Y. Kanakahaiah | 20 M | 68 | 61½ | 13½ | 75 | 17·3 | 12 | 17 | 63 | 17 | 80 | 32 | 12 | 32 |
| 9 | M. Ch. Ramalah | 35 M | 60 | 58 | 18 | 76½ | 26 | 13 | 26 | 59 | 22 | 81 | 34 | 13 | 34 |
| 10 | Y. Ankaiah | 20 M | 67 | 63 | 17 | 80 | 20 | 12 | 20 | 68½ | 18½ | 77 | 31 | 12 | 31 |
| 11 | Y. Lingniah | 35 M | 66 | 59 | 16 | 75 | 28 | 14 | 28 | 59 | 18 | 77 | 32 | 14 | 42 |
| 12 | K. Subbaiah | 40 M | 64 | 58 | 13 | 71 | 1..·1 | 10 | 12 | 57½ | 25½ | 83 | 37 | 10 | 37 |
| 13 | M. Ch. Haraniah | 18 M | 20 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 14 | M. Sitaiah | 20 M | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 15 | M. Sitamma | 25 F | 68 | 57½ | 22 | 79½ | 34 | 12 | 34 | 60½ | 23½ | 84 | 42 | 12 | 82 |
| 16 | K. Rangamma | 25 F | 39 | 14 | 5 | 19 | 3 | 10 | 3 | .. | .. | .. | | | .. |
| 17 | K. Bavavaiah | 30 M | 28 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 18 | K. Papamma | 50 F | 38 | 31½ | 3 | 34½ | 5 | 10 | 5 | .. | .. | .. | .. | .. | .. |
| 19 | M. Ch. Ankamma | 30 F | 60 | 60½ | 22½ | 83 | 43 | 15 | 83 | 47 | 25 | 73 | 47 | 15 | 7 |
| 20 | Ch. Haghawamma | 30 F | 67 | 56 | 24 | 80 | 18 | 12 | 18 | 59 | 20 | 79 | 41 | 12 | 81 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | M. Calawrdhamma. . . . . . | 38 F | 57 | 47½ | 22¼ | 70 | 30 | 14 | 30 | 25 | 1 | 35 | 20 | 14 | 20 |
| 22 | K. Lakshamma . . . . . . | 32 F | 65 | 65 | 16 | 81 | 24 | 14 | 24 | 56½ | 15½ | 72 | 25 | 14 | 25 |
| 23 | N. Kottamma . . . . . . | 25 F | 65 | 54 | 16 | 70 | 24 | 12 | 24 | 59 | 21 | 80 | 45 | 12 | 35 |
| 24 | M. Mahalakshamma . . . . . | 40 F | 68 | 65 | 12 | 77 | 13·2 | 10 | 13 | 62 | 18 | 80 | 29 | 20 | 29 |
| 25 | N. Lakshmma . . . . . . | 25 F | 26 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 26 | B. Mukhamma . . . . . . | 30 F | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 27 | B. Kondaiah . . . . . . | 40 M | 65 | 58 | 19 | 76 | 22 | 13 | 22 | 49 | 18 | 67 | 38 | 13 | 38 |
| 28 | Y. Kasturmma . . . . . . | 30 F | 46 | 35½ | 7 | 42½ | 6 | 10 | 6 | .. | .. | .. | .. | .. | .. |
| 29 | M. Sushmma . . . . . . | 16 F | 68 | 47½ | 47 | 84½ | 88 | 16 | 168 | 47½ | 41½ | 89 | 102 | 16 | 188 |
| 30 | M. Venkaiah . . . . . . | 18 M | 66 | 60½ | 28 | 88½ | 49 | 16 | 89 | 54 | 29 | 83 | 57 | 16 | 97 |
| 31 | M. Manikyam . . . . . . | 18 M | 65 | 58 | 14½ | 72½ | 21 | 12 | 21 | 51 | 16 | 67 | 29 | 12 | 29 |
| 32 | M. Venkateshwarhia . . . . . | 20 M | 34 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 33 | M. P. Ramaiya . . . . . . | 45 M | 67 | 60 | 15 | 75 | 19 | 12 | 19 | 64 | 17 | 81 | 33 | 12 | 33 |
| 34 | M. Ankaiya . . . . . . | 20 M | 26 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 35 | M. P. Ankamma . . . . . . | 30 F | 60 | 42 | 6½ | 48½ | 10 | 10 | 10 | 60 | 17 | 77 | 25 | 10 | 27 |
| 36 | B. Sitamma . . . . . . | 40 F | 62 | 53 | 25 | 78 | 20·2 | 12 | 20 | 38 | 13 | 51 | 27 | 12 | 25 |
| 37 | M. Harmmayamma. . . . . . | 16 F | 59 | 27 | 8 | 35 | 9·0 | 12 | 9 | 59 | 23 | 81 | 45 | 12 | 85 |
| 38 | G. Vankamma . . . . . . | 20 F | 35 | 60 | 18 | 78 | 17·3 | 12 | 17 | 16 | 4 | 20 | 9 | 12 | 9 |
| 39 | G. Kottamma. . . . . . | 20 F | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 40 | H. S. Murti . . . . . . | 18 M | 44 | 29 | 5 | 33 | 4 | 10 | 4 | .. | .. | .. | .. | .. | .. |
| 41 | S. Meerambi . . . . . . | 45 | 37 | 55 | 19 | 74 | 22 | 22 | 10 | 56 | 27 | 83 | 56 | 10 | 96 |
| 42 | S. Bhibhijohan . . . . . . | 30 M | 37 | 58 | 19 | 77 | 16 | 10 | 16 | 60 | 19½ | 79½ | 37 | 10 | 36 |
| 43 | S. Chandabebam . . . . . . | 16 F | 37 | 52 | 19½ | 71½ | 11·2 | 10 | 111 | 58 | 23 | 81 | 42 | 10 | 82 |
| 44 | G. Chousti . . . . . . | 15 M | 38 | 54 | 23 | 77 | 14·1 | 10 | 14 | 60 | 18 | 78 | 32 | 10 | 32 |
| 45 | K. V. Hubbamma . . . . . . | 35 F | 35 | 57 | 27 | 84 | 40 | 12 | 1 | 55 | 21 | 76 | 42 | 12 | 82 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | M. Chanchamma | 30 | F | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 47 | K. Subbamma | 30 | F | 36 | 61½ | 12 | 73½ | 11 | 10 | 11 | 53 | 18 | 71 | 31 | 10 | 31 |
| 48 | N. Ankamma | 20 | F | 32 | 66½ | 16 | 82½ | 28 | 14 | 28 | 39 | 9 | 48 | 23 | 14 | 23 |
| 49 | K. Challama | 40 | F | 23 | 60 | 17 | 78 | 11 | 10 | 11 | 44 | 8 | 52 | 9 | 10 | 9 |
| 50 | G. Venkal avanhia | 20 | M | 38 | 60 | 27½ | 87½ | 45·1 | 16 | 85 | 51 | 31 | 82 | 78 | 16 | 118 |
| 51 | B. Ammami | 20 | F | 11 | 7 | 5 | 12 | 2·2 | 10 | 2 | .. | .. | .. | .. | .. | .. |
| 52 | N. Pumamala | 16 | F | 38 | 54 | 29½ | 83½ | 30 | 12 | 30 | 60 | 24½ | 84½ | 47 | 12 | 87 |
| 53 | Hugyidd Subbamma | 25 | F | 30 | 36 | 10 | 46 | 13 | 12 | 13 | 60 | 25 | 85 | 48 | 12 | 88 |
| 54 | P. Raghavadeava | 16 | M | 16 | 32 | 10 | 42 | 12 | 10 | 12 | .. | .. | .. | .. | .. | .. |
| 55 | P. M. Sybbaiya | 16 | M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 56 | P. Venkatasubaiya | 16 | M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | | 2769 | 1409 | | |

Name of Parishramalaya : Ghantsala

(Andhra State)

| Serial No. | Name of operative | Class of spinner | | No. of days of attendance | From 10th Mar., 1956 to 27th Mar., 56 | | | | | | From 28th March, 1956 to 13th Apl., 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | | Card-ing | Spg. | Total | Pro-duction Hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Pro-duction Hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | V. Sarojini Devi | | F | 82 | 49 | 36 | 85 | 70 | 14 | 60 | 40 | 21 | 61 | 50 | 14 | 50 |
| 2 | G. Subbamma | | F | 90 | 65 | 30 | 95 | 30 | 13 | 24 | 60 | 30 | 90 | 43 | 13 | 30 |
| 3 | G. Rattamma | — | F | 90 | 65 | 26 | 91 | 44 | 14 | 30 | 75 | 45 | 120 | 20 | 13 | 60 |
| 4 | G. Laxmikanthamma | — | F | 75 | 53 | 30 | 83 | 58 | 14 | 45 | 17 | 10 | 27 | 41 | 14 | 20 |
| 5 | V. Udayalaxmi | — | F | 90 | 52 | 26 | 78 | 31 | 13 | 20 | 75 | 15 | 90 | 97 | 13 | 40 |
| 6 | B. V. Subamma | — | F | 90 | 52 | 32 | 84 | 32 | 16 | 15 | 55 | 37 | 92 | 37 | 16 | 18 |
| 7 | G. Manickam | — | F | 90 | 41 | 42 | 83 | 44 | 12 | 25 | 60 | 45 | 106 | 104 | 12 | 60 |
| 8 | T. V. Lassamma | — | F | 90 | 56 | 42 | 98 | 45 | 12 | 25 | 68 | 38 | 106 | 108 | 12 | 60 |
| 9 | Y. B. Kutumbamma | — | F | 90 | 51 | 26 | 77 | 19 | 13 | 10 | 60 | 35 | 95 | 48 | 12 | 25 |
| 10 | K. Seetamamm | — | F | 90 | 64 | 27 | 91 | 40 | 13 | 20 | 75 | 45 | 120 | 132 | 14 | 80 |
| 11 | V. L. Kanthamma | — | F | 80 | 65 | 26 | 91 | 41 | 13 | 20 | 40 | 30 | 70 | 51 | 13 | 25 |
| 12 | V. Lakshmiswarama | — | F | 90 | 65 | 26 | 91 | 55 | 13 | 30 | 67 | 30 | 97 | 78 | 14 | 35 |
| 13 | K. Danalaxmi | — | F | 90 | 72 | 22 | 94 | 41 | 14 | 20 | 75 | 45 | 120 | 112 | 19 | 50 |
| 14 | K. Venkatasubamma | — | F | 90 | 58 | 29 | 87 | 45 | 14 | 20 | 60 | 44 | 104 | 105 | 14 | 50 |
| 15 | V. Sakhubhai | — | F | 87 | 56 | 31 | 87 | 21 | 14 | 15 | 60 | 30 | 90 | 34 | 15 | 15 |
| 16 | V. Jayalakshmi | — | F | 90 | 65 | 26 | 91 | 32 | 14 | 15 | 65 | 35 | 100 | 49 | 13 | 30 |
| 17 | V. Yasodamma | — | F | 90 | 50 | 42 | 42 | 60 | 15 | 30 | 37 | 65 | 102 | 87 | 14 | 50 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | V. Subamma | — F | 90 | 66 | 42 | 108 | 57 | 15 | 30 | 45 | 60 | 105 | 75 | 15 | 35 |
| 19 | V. Subbarao | — M | 88 | 45 | 9 | 54 | 15 | 15 | 7 | 71 | 19 | 90 | 40 | 14 | 20 |
| 20 | V. Vimalamba | — F | 82 | 48 | 45 | 93 | 82 | 15 | 40 | 24 | 14 | 38 | 43 | 14 | 20 |
| 21 | R. Rajalaxmi | — F | 90 | 67 | 26 | 93 | 26 | 13 | 14 | 75 | 15 | 90 | 57 | 14 | 30 |
| 22 | N. Bullemma | — F | 88 | 50 | 36 | 86 | 39 | 15 | 20 | 52 | 30 | 83 | 59 | 15 | 30 |
| 23 | G. Navaratnam | — F | 75 | 50 | 44 | 91 | 14 | 15 | 50 | 25 | 9 | 34 | 22 | 14 | 10 |
| 24 | G. Seetamma | — F | 89 | 44 | 22 | 66 | 13 | 13 | 7 | 33 | 56 | 89 | 36 | 13 | 16 |
| 25 | V. Prabhavathy | — F | 85 | 65 | 15 | 80 | 15 | 15 | 7 | 33 | 57 | 90 | 36 | 13 | 16 |
| 26 | B. Rajalaxmi | — F | 76 | 57 | 32 | 89 | 40 | 14 | 20 | 69 | 37 | 106 | 49 | 15 | 22 |
| 27 | J. Raghavamma | — F | 90 | 60 | 29 | 89 | 46 | 15 | 20 | 60 | 45 | 105 | 976 | 16 | 40 |
| 28 | J. Susheela | — F | 90 | 50 | 34 | 84 | 39 | 15 | 17 | 60 | 45 | 105 | 97 | 16 | 45 |
| 29 | B. Dharalaxmi | — F | .. | .. | .. | .. | .. | .. | .. | 71 | 30 | 101 | 53 | 15 | 25 |
| 30 | K. Seetharamaya | — M | 90 | 65 | 26 | 81 | 26 | 13 | 14 | 75 | 20 | 95 | 57 | 14 | 30 |
| 31 | V. Yasodamma | — F | 90 | 59 | 31 | 80 | 25 | 15 | 10 | 56 | 36 | 92 | 43 | 14 | 20 |
| 32 | I. Jayamma | — F | 90 | 55 | 33 | 88 | 45 | 15 | 20 | 60 | 45 | 105 | 100 | 16 | 45 |
| 33 | V. Nimmavathy | — F | 90 | 67 | 26 | 93 | 28 | 14 | 14 | 50 | 40 | 90 | 45 | 15 | 20 |
| 34 | G. V. Ratnam | — F | 90 | 50 | 36 | 86 | 45 | 15 | 20 | 60 | 45 | 105 | 105 | 14 | 50 |
| 35 | B. R. Tulasi Amma | — F | 75 | 61 | 36 | 97 | 39 | 13 | 20 | 18 | 8 | 26 | 19 | 14 | 10 |
| 36 | A. Raghavamma | — F | 90 | 45 | 39 | 84 | 27 | 13 | 15 | 30 | 30 | 60 | 67 | 13 | 20 |
| 37 | G. Seetharamaya | — M | 90 | 49 | 16 | 65 | 20 | 16 | 10 | 60 | 30 | 90 | 34 | 17 | 14 |
| 38 | A. Achamma | — F | 90 | 47 | 37 | 84 | 47 | 13 | 20 | 61 | 30 | 91 | 30 | 13 | 15 |
| 39 | B. Ramulu | — F | 90 | 48 | 33 | 81 | 29 | 13 | 15 | 36 | 56 | 92 | 35 | 13 | 16 |
| 40 | G. Seetaratnam | — F | 70 | 37 | 15 | 52 | 19 | 12 | 10 | 60 | 30 | 90 | 32 | 12 | 15 |
| 41 | K. Sukhavani | — F | 70 | 57 | 30 | 87 | 30 | 15 | 15 | 45 | 35 | 80 | 15 | 15 | 7 |
| 42 | V.S. Laxmi | — F | 50 | 48 | 20 | 68 | 10 | 10 | 7 | .. | .. | .. | .. | .. | .. |
| 43 | V. Jayapradha | — M | 64 | 59 | 16 | 73 | 17 | 10 | 10 | 60 | 30 | 90 | 21 | 12 | 12 |
| 44 | V. Sralashmi | — F | 67 | 57 | 23 | 80 | 15 | 15 | 7 | 52 | 45 | 97 | 45 | 15 | 20 |
| 45 | V. Dasatamma | — F | 70 | 59 | 22 | 81 | 28 | 14 | 15 | 75 | 45 | 120 | 155 | 15 | 75 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | V. Sitamma . . . . . | — F | 66 | 56 | 32 | 88 | 30 | 15 | 14 | 60 | 30 | 90 | 60 | 15 | 30 |
| 47 | K. Veralasamma . . . . . | — F | 67 | 68 | 32 | 100 | 15 | 15 | 7 | 45 | 44 | 89 | 40 | 14 | 20 |
| 48 | V. Sevarasam . . . . . . | — M | 78 | 67 | 21 | 88 | 32 | 14 | 16 | 60 | 30 | 90 | 75 | 15 | 35 |
| 49 | V. Sarojani . . . . . . | — F | 70 | 55 | 24 | 79 | 24 | 12 | 15 | 55 | 41 | 96 | 45 | 15 | 20 |
| 50 | K. Nirmala . . . . . . | — F | 68 | 58 | 27 | 85 | 26 | 13 | 15 | 60 | 30 | 90 | 40 | 14 | 18 |
| 51 | K. Sampurnamma . . . . . | — F | 70 | 57 | 19 | 76 | 18 | 12 | 10 | 62 | 28 | 90 | 34 | 15 | 19 |
| 52 | V. K. Kumari . . . . . . | — F | 70 | 56 | 26 | 82 | 25 | 13 | 14 | 60 | 30 | 90 | 49 | 15 | 20 |
| 53 | B. Gosemdramma . . . . . | — F | 30 | 48 | 24 | 72 | 15 | 15 | 7 | .. | .. | .. | .. | .. | .. |
| 54 | D. Veeralashmi . . . . . | — F | 65 | 47 | 21 | 66 | 13 | 13 | 7 | 63 | 30 | 93 | 45 | 15 | 20 |
| 55 | D. Sarojani . . . . . . | — F | 68 | 52 | 16 | 68 | 13 | 13 | 7 | 60 | 30 | 90 | 30 | 15 | 15 |
| 56 | D. S. Lakshmi . . . . . | — F | 30 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 57 | G. Sitaramma . . . . . . | — F | 70 | 52 | 35 | 87 | 43 | 18 | 17 | 60 | 30 | 90 | 61 | 18 | 20 |
| 58 | V. Visalashamma . . . . . | — F | 70 | 48 | 28 | 76 | 39 | 15 | 16 | 58 | 34 | 92 | 70 | 15 | 30 |
| 59 | B. S. Vasamma . . . . . | — F | 68 | 57 | 37 | 94 | 53 | 13 | 20 | 60 | 31 | 91 | 80 | 15 | 35 |
| 60 | M. Venkatasubbamma . . . . | — F | 70 | 56 | 19 | 84 | 18 | 12 | 10 | 66 | 33 | 99 | 88 | 13 | 20 |
| 61 | M. V. S. S. Denalakshm . . . . | — F | 70 | 61 | 19 | 80 | 18 | 12 | 10 | 66 | 32 | 98 | 38 | 13 | 20 |
| 62 | V. Sakuthalamma . . . . . | — F | 70 | 52 | 30 | 82 | 55 | 14 | 25 | 75 | 45 | 120 | 135 | 13 | 70 |
| 63 | K. Pushpavati . . . . . | — F | 69 | 66 | 27 | 93 | 31 | 15 | 14 | 72 | 25 | 97 | 52 | 13 | 25 |
| 64 | K. Annusaiamma . . . . . | — F | 70 | 70 | 24 | 94 | 13 | 15 | 14 | 69 | 21 | 90 | 52 | 14 | 20 |
| 65 | D. Susilamma . . . . . | — F | 68 | 65 | 23 | 88 | 31 | 14 | 15 | 40 | 40 | 80 | 54 | 15 | 20 |
| 66 | V. K. Kumari . . . . . . | — F | 70 | 60 | 21 | 81 | 22 | 14 | 10 | 60 | 60 | 100 | 54 | 15 | 20 |
| 67 | M. S. Mahalakshmiamma . . . . | — F | 69 | 55 | 29 | 84 | 29 | 16 | 16 | 60 | 31 | 91 | 84 | 16 | 35 |
| 68 | V. L. Eswaramma . . . . . | — F | 64 | 40 | 12 | 52 | 15 | 15 | 7 | 52 | 45 | 97 | 45 | 15 | 20 |
| 69 | V. Sitaratnam . . . . . . | — F | 69 | 55 | 26 | 81 | 30 | 14 | 14 | 61 | 31 | 92 | 57 | 15 | 25 |
| 70 | P. Pushpavati . . . . . . | — F | 70 | 47 | 35 | 82 | 30 | 14 | 14 | 60 | 30 | 90 | 60 | 15 | 25 |
| 71 | D. Kobaswaramma . . . . . | — F | 68 | 60 | 26 | 86 | 29 | 13 | 12 | 61 | 30 | 91 | 57 | 14 | 24 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | D. Rosamma . . . . . | — F | 68 | 52 | 36 | 88 | 31 | 14 | 15 | 60 | 33 | 93 | 84 | 14 | 36 |
| 73 | K. Thulasamma . . . . . | — F | 70 | 60 | 30 | 90 | 46 | 13 | 20 | 45 | 30 | 75 | 16 | 16 | 7 |
| 74 | G. Ratnakumari . . . . . | — F | 70 | 52 | 24 | 76 | 12 | 12 | 7 | 58 | 32 | 90 | 35 | 15 | 15 |
| 75 | G. Dhanalakshmi . . . . . | — F | 69 | 52 | 31 | 83 | 33 | 11 | 20 | 60 | 30 | 90 | 74 | 14 | 35 |
| 76 | V Varamma . . . . . . | — F | 70 | 65 | 26 | 91 | 48 | 14 | 20 | 60 | 45 | 105 | 135 | 13 | 70 |
| 77 | V. Rampuramma . . . . . | — F | 45 | .. | .. | .. | .. | .. | .. | 60 | 30 | 90 | 64 | 14 | 50 |
| 78 | G. Nagaiya . . . . . . | — M | 70 | 57 | 30 | 87 | 30 | 14 | 14 | 60 | 45 | 105 | 150 | 15 | 70 |
| 79 | V. Srulashmi . . . . . . | — F | 66 | 52 | 26 | 78 | 19 | 12 | 10 | 57 | 41 | 98 | 30 | 15 | 14 |
| 80 | V. Dulasamma . . . . . | — F | 67 | 48 | 25 | 73 | 13 | 13 | 6 | 46 | 30 | 76 | 31 | 15 | 14 |
| 81 | V. V. Subamma . . . . . | — F | 67 | 36 | 25 | 61 | 13 | 13 | 6 | 52 | 30 | 82 | 32 | 15 | 14 |
| 82 | K. Ratnabhushnam . . . . . | — M | 67 | 60 | 28 | 88 | 13 | 13 | 6 | 51 | 44 | 95 | 31 | 15 | 14 |
| 83 | B. Radhakrishnamoorthy . . | — M | 40 | 55 | 20 | 75 | 10 | 10 | 6 | 43 | 22 | 65 | 26 | 13 | 14 |
|  | Total |  |  |  |  |  |  |  |  |  |  | 7237 | 4785 |  |  |

Name of Parishramalayas CHIRALA—District Guntur (Andhra)

| Serial No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Andam Nahmidevam | 35 | F | 74½ | 101 | 71 | 178 | 88 | 12 | 10 | 56 | 28 | 84 | 57 | 14 | 10 |
| 2 | Avkash Kantekharamma | 40 | F | 25½ | | | | | | | | | | | | |
| 3 | Kundal Ntapamma | 26 | F | 77 | 101 | 77 | 183 | 74 | 12 | 10 | 52 | 26 | 78 | 39 | 13 | 10 |
| | Akurahi Rajamma | 24 | F | 40½ | | | | | | | | | | | | |
| 5 | Pale Venkat Subnamma | 20 | F | 52 | 66 | 35 | 101 | 41 | 13 | 9 | | | | | | |
| 6 | Manliveddiandiratnamya | 28 | F | 27½ | | | | | | | | | | | | |
| 7 | Karchampudi Ramanmma | 40 | F | 33 | 40 | 29 | 69 | 19 | 13 | | 2 | | | | | |
| 8 | Karchpudi Dhanyatari | 16 | F | 60 | 93 | 59 | 152 | 67 | 13 | 9 | 25 | 9 | 34 | 17 | 12 | 9 |
| 9 | Soli Sarsamma | 45 | F | 75 | 104 | 75 | 179 | 39 | 14 | 9 | 44 | 34 | 78 | 28 | 11 | 12 |
| 10 | Andar Adilaxmi | 28 | F | 74½ | 129 | 64 | 193 | 124 | 13 | 12 | 54 | 31 | 85 | 70 | 11 | 12 |
| 11 | Peluri Mohanrao | 16 | F | 68½ | 87 | 61 | 148 | 58 | 12 | 12 | 49 | 20 | 69 | 56 | 12 | 11 |
| 12 | Dantia nadi | 19 | M | 75½ | 120 | 73 | 193 | 89 | 12 | 11 | 48 | 27 | 75 | 54 | 11 | 10 |
| 13 | Asadi Vankateunnamma | 28 | F | 37½ | 12 | 10 | 22 | 5 | 10 | 14 | | | | | | |
| 14 | Raji Laxmikantamma | 16 | F | 17½ | | | | | | | | | | | | |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Guddahi Shitamma . . . . | 20 | F | 68 | 85 | 59 | 144 | 48 | 12 | 10 | 45 | 32 | 77 | 32 | 14 | 10 |
| 16 | Sharlvahi Laxminamma . . . | 26 | F | 24½ | | | | | | | | | | | | |
| 17 | Mangar Sunnamma . . : . | 28 | F | 68½ | 79 | 44 | 123 | 63 | 12 | 10 | 54 | 30 | 84 | 47 | 13 | 12 |
| 18 | Raji Dakshayani . . . . | 26 | F | 70½ | 105 | 63 | 168 | 98 | 12 | 9 | 55 | 28 | 83 | 55 | 11 | 10 |
| 19 | Sudadi Rangnathkamma . . . | 34 | F | 70 | 119 | 72 | 191 | 72 | 12 | 9 | 54 | 27 | 81 | 54 | 11 | 10 |
| 20 | Raji Punnamma . . . . . | 28 | F | 74 | 119 | 65 | 184 | 106 | 11 | 10 | 56 | 27 | 83 | 66 | 12 | 10 |
| 21 | Pinnamvankat Summamma . . | 24 | F | 21½ | | | | | | | | | | | | |
| 22 | Mundatti Krishnavennamma . . | 50 | F | 46½ | 28 | 13 | 41 | 7 | 10 | 5 | | | | | | |
| 23 | Padval Sunnamma . . . . | 45 | F | 47 | 26 | 12 | 38 | 7 | 10 | 5 | | | | | | |
| 24 | Kandali Sarsattamma . . . | 36 | F | 42 | 38 | 15 | 53 | 7 | 10 | 5 | | | | | | |
| 25 | Kandali Manekchumma . . . | 34 | F | 42 | 17 | 6 | 23 | 2 | 11 | 0 | | | | | | |
| 26 | Nand Shavamma . . . . | 30 | F | 52½ | 44 | 24 | 68 | 16 | 12 | 10 | | | | | | |
| 27 | Bannas Sunamma . . . . | 28 | F | 29½ | | | | | | | | | | | | |
| 28 | Kalyan Vankat Sunnamma . . | 16 | F | 42 | | | | | | | | | | | | |
| 29 | Jakka Magamma . . . . | 16 | F | 71 | 100 | 57 | 157 | 52 | 12 | 10 | 49 | 25 | 74 | 38 | 12 | 10 |
| 30 | Ganli Kankamma . . . . | 15 | F | 42½ | 14 | 8 | 22 | 7 | 13 | 10 | | | | | | |
| 31 | Jakka Apimma . . . . | 18 | F | 70½ | 86 | 45 | 131 | 63 | 12 | 10 | 49 | 30 | 79 | 50 | 13 | 10 |
| 32 | Muderam Sunamma . . . | 33 | F | 77 | 101 | 63 | 164 | 70 | 14 | 10 | 56 | 27 | 83 | 50 | 14 | 10 |
| 33 | Akusati Lakshamma . . . | 45 | F | 51½ | 60 | 32 | 92 | 33 | 13 | 9 | | | | | | |
| 34 | Pappas Jalamma . . . . | 28 | F | 38 | | | | | | | | | | | | |
| 35 | Gundi Alivallamma . . . . | 45 | F | 47½ | 30 | 15 | 45 | 10 | 12 | 9 | | | | | | |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | Sannamohan Vankatratnama . . | 32 | F | 18½ | | | | | | | | | | | | |
| 37 | Alehi Sunnaratanmma . . . | 21 | F | 47½ | 86 | 47 | 133 | 69 | 12 | 8 | 52 | 30 | 82 | 62 | 13 | 10 |
| 38 | Nadimohan Sarojini . . . . | 20 | F | 17 | | | | | | | | | | | | |
| 39 | Ande Dakshachamma . . . | 28 | F | 60 | 107 | 76 | 183 | 55 | 11 | 10 | 45 | 32 | 77 | 38 | 12 | 10 |
| 40 | Sapparapu Rattamma . . . | 20 | F | 58 | 107 | 79 | 186 | 56 | 14 | 10 | 41 | 24 | 65 | 38 | 11 | 10 |
| 41 | Rajvaiup Akayamma . . . | 10 | F | 38 | 54 | 27 | 81 | 12 | 13 | 12 | | | | | | |
| 42 | Ade Pravashanna . . . . | 14 | F | 61 | 111 | 72 | 183 | 43 | 14 | 10 | 45 | 31 | 76 | 31 | 12 | 9 |
| 43 | Nandam Ansursh . . . . | 19 | M | 29 | 41 | 24 | 66 | 11 | 15 | 10 | | | | | | |
| 44 | Nanddrita Ravappa . . . . | 16 | M | 31 | 31 | 45 | 14 | 10 | 14 | 12 | | | | | | |
| 45 | Maikuri Koderu Namappa . . | 18 | M | 31½ | 50 | 16 | 46 | 6 | 13 | 9 | | | | | | |
| 46 | Madupuri Rakhamma . . . | 20 | F | 36½ | 50 | 27 | 77 | 12 | 12 | 10 | | | | | | |
| 47 | Vadiraneni Samrajya . . . | 22 | F | 36½ | 51 | 31 | 82 | 19 | 11 | 10 | | | | | | |
| 48 | Nandam Shashejani . . . . | 19 | F | 60 | 100 | 68 | 168 | 41 | 11 | 10 | 45 | 32 | 77 | 34 | 14 | 8 |
| 49 | Abbas Ratamma . . . . | 24 | F | 53½ | 92 | 76 | 168 | 33 | 12 | 9 | 44 | 34 | 78 | 27 | 13 | 7 |
| 50 | Anndat Rapimma . . . . | 26 | F | 56½ | 109 | 76 | 185 | 72 | 14 | 8 | 47 | 25 | 72 | 54 | 14 | 9 |
| 51 | Mundi Nangaramma . . . | 27 | F | 54 | 94 | 83 | 177 | 45 | 13 | 7 | 40 | 32 | 72 | 31 | 13 | 6 |
| 52 | Pankuri Salamma . . . . | 25 | F | 54 | 120 | 60 | 180 | 33 | 13 | 9 | 46 | 34 | 79 | 36 | 14 | 7 |
| 53 | Nannivadi Shrilakashmi . . . | 24 | F | 52½ | 100 | 81 | 181 | 38 | 14 | 10 | 44 | 39 | 83 | 28 | 13 | 10 |
| 54 | Mundaki Vankataubarmma . . | 23 | F | 57½ | 97 | 81. | 178 | 36 | 14 | 10 | 40 | 32 | 72 | 29 | 14 | 10 |
| 55 | Maddin Ratamma . . . . | 23 | F | 26½ | 89 | 90 | 179 | 35 | 15 | 10 | 44 | 33 | 77 | 23 | 13 | 10 |
| 56 | Mudam Vankat Sulamma . . . | 24 | F | 28½ | 34 | 33 | 67 | 5 | 16 | 10 | | | | | | |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57 | Abbas Adimma . . . . . | 26 | F | 34 | 33 | 13 | 48 | 6 | 14 | 8 | | | | | | |
| 58 | Bhaurapatnam Adilakshmi | 28 | F | 55 | 98 | 73 | 171 | 77 | 13 | 9 | 52 | 31 | 83 | 62 | 12 | 9 |
| 59 | Manshipalampu Samrajya . . | 29 | M | 52 | 80 | 49 | 129 | 42 | 14 | 7 | 53 | 31 | 84 | 47 | 14 | 10 |
| 60 | Dadukuri Alivelampa . . . | 27 | F | 39 | 34 | 30 | 64 | 12 | 13 | 10 | | | | | | |
| 61 | Abbas Sullamma . . . . . | 19 | F | 53½ | 85 | 64 | 149 | 37 | 14 | 14 | 44 | 36 | 80 | 33 | 12 | 11 |
| 62 | Akushahi Satyavatamma . . . | 24 | F | 44½ | 61 | 63 | 124 | 34 | 12 | 7 | 23 | 18 | 41 | 13 | 14 | 10 |
| 63 | Palampukatamma . . . . | 40 | F | 49½ | 81 | 71 | 152 | 39 | 11 | 12 | 41 | 29 | 70 | 29 | 12 | 8 |
| 64 | Velisharpu Lashmamma . . . | 26 | F | 32 | 24 | 14 | 38 | 12 | 14 | 10 | 44 | 36 | 80 | 36 | 12 | 10 |
| 65 | Chadlam Nagratnamma . . . | 28 | F | 54 | 115 | 77 | 192 | 72 | 12 | 11 | 48 | 27 | 75 | 41 | 12 | 10 |
| 66 | Samudram Pimpimma . . . | 50 | F | 16 | 22 | 15 | 37 | 7 | 10 | 12 | | | | | | |
| 67 | Andat Stamma . . . . . | 56 | F | 22 | 41 | 36 | 77 | 8 | 10 | 10 | | | | | | |
| | TOTAL . . . . | | | | | | | | | | | | 2570 | 1485 | | |

Name of Parishramalaya : Ambar Charkha Parishramalaya
Naray varam,
Chittor District. (Andhra)

Date of Starting 17 January 1956.
Number of Charkha sets : 20

| Serial No. | Name of operative | Class of Spinner | No. of days of attendance | From 10th March, 56 to 27th March, 56 | | | | | | From 28th March, 56 to 13th April, 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | Prodn. hanks | Count | | Duration of work. (hours) | | | Prodn. hanks | Count | Loss tolas |
| | | Age-Sex | | Carding | Spg. | Total | | | tolas | Carding | Spg. | Total | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Seshamma . . . . . . | 18 F | 74 | 67 | 43 | 110 | 70 | 16 | 25 | 67 | 49½ | 116½ | 107 | 18 | 40 |
| 2 | P. Sakuntalamma . . . . . | 20 F | 69 | 45 | 27 | 72 | 48 | 15 | 12 | 46½ | 55 | 119½ | 98 | 18 | 49 |
| 3 | S. Sengaramma . . . . . | 15 F | 76 | 75 | 41 | 116 | 44 | 14 | 26 | 64 | 55½ | 119½ | 55 | 16 | 30 |
| 4 | A. Chengamma . . . . . | 42 F | 67 | 49 | 37 | 86 | 26 | 13 | 24 | 60 | 58 | 118 | 45 | 14 | 39 |
| 5 | I. Ramanjanma . . . . . | 30 F | 71 | 73½ | 36 | 109½ | 32 | 14 | 30 | 68½ | 32 | 100½ | 35 | 14 | 16 |
| 6 | P. Tayamma . . . . . | 35 F | 70 | 34½ | 52 | 86½ | 43 | 16 | 25 | 57½ | 62 | 119½ | 103 | 18 | 35 |
| 7 | L. Chengamma . . . . . | 33 F | 67 | 75½ | 34 | 109½ | 43 | 15 | 40 | 48½ | 23½ | 72 | 32 | 16 | 18 |
| 8 | J. Narasamma . . . . . . | 45 F | 36 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 9 | R. Govindamma . . . . . | 20 F | 75 | 74 | 36½ | 110½ | 50 | 16 | 45 | 71 | 43 | 114 | 84 | 20 | 42 |
| 10 | S. Savitramma . . . . . | 20 F | 68 | 40 | 23½ | 63½ | 27 | 18 | 24 | 73 | 42 | 115 | 78 | 20 | 34 |
| 11 | K. Nagaratnamma . . . . . | 15 F | 75 | 67 | 49 | 116 | 58 | 20 | 34 | 64 | 55 | 119 | 91 | 20 | 26 |
| 12 | R. Radhamma . . . . . | 30 F | 76 | 76 | 32½ | 108½ | 38 | 15 | 30 | 76 | 42 | 118 | 67 | 16 | 30 |
| 13 | M. Sarojamma . . . . . | 15 F | 75 | 72½ | 38 | 110½ | 37 | 13 | 35 | 75½ | 39½ | 115 | 47 | 14 | 25 |
| 14 | K. Kannamma. . . . . . | 28 F | 66 | 32 | 45 | 77 | 33 | 14 | 21 | 53 | 56 | 109 | 52 | 14 | 32 |
| 15 | P. Tayaramma . . . . . . | 20 F | 73 | 49½ | 44½ | 94 | 44 | 15 | 24 | 55½ | 59½ | 115 | 86 | 16 | 38 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | G. Ratnamma | 25 F | 76 | 53 | 61½ | 114½ | 57 | 16 | 46 | 55 | 33½ | 88½ | 89 | 18 | 38 |
| 17 | D. Kannamma | 20 F | 75 | 58 | 61½ | 119½ | 68 | 14 | 46 | 53½ | 54½ | 108 | 100 | 15 | 42 |
| 18 | K. Lakshmanamma | 45 F | 71 | 56 | 42 | 98 | 29 | 14 | 24 | 52½ | 46 | 98½ | 36 | 14 | 10 |
| 19 | C. H. Munilakshmma | 40 F | 30 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 20 | C. H. Subeelamma | 16 F | 74 | 75 | 29½ | 104½ | 25 | 13 | 32 | 66 | 38½ | 104½ | 34 | 14 | 28 |
| 21 | B. Munemma | 20 F | 74 | 55½ | 59 | 114½ | 80 | 18 | 50 | 44 | 55½ | 99½ | 84 | 20 | 40 |
| 22 | B. Desamma | 24 F | 73 | 46½ | 55½ | 102 | 53 | 16 | 40 | 41½ | 68½ | 110 | 84 | 16 | 34 |
| 23 | M. Ademma | 35 F | 73 | 50 | 57 | 107 | 48 | 14 | 35 | 39½ | 72 | 111½ | 67 | 14 | 34 |
| 24 | P. Andalamma | 23 F | 43 | .. | .. | .. | .. | .. | .. | 20 | 18½ | 38½ | 21 | 16 | 11 |
| 25 | M. Munemma | 20 F | 71 | 61 | 43½ | 104½ | 45 | 15 | 35 | 50½ | 68½ | 119 | 104 | 16 | 65 |
| 26 | M. Andalamma | 25 F | 61 | 31 | 25 | 56 | 30 | 15 | 24 | 39 | 61½ | 10½ | 71 | 16 | 29 |
| 27 | G. Padmanatama | 30 F | 70 | 64 | 50 | 114 | 61 | 15 | 42 | 52 | 62 | 117 | 79 | 15 | 25 |
| 28 | P. Alivelamma | 24 F | 64 | 51½ | 51½ | 83 | 44 | 16 | 45 | 44 | 67 | 116 | 85 | 18 | 40 |
| 29 | C. H. Ramakrishnaiah | 40 M | 60 | 78½ | 36 | 114½ | 44 | 16 | 30 | 73½ | 41 | 114½ | 43 | 18 | 17 |
| 30 | N. Doraswami | 25 M | 67 | 45 | 48 | 93 | 33 | 18 | 28 | 56 | 62 | 118 | 68 | 18 | 26 |
| 31 | A. C. Venkatrailu | 20 M | 57 | 50 | 43 | 93 | 49 | 18 | 26 | .. | .. | .. | .. | .. | .. |
| 32 | K. Subramanian | 15 M | 74 | 70½ | 45 | 115½ | 47 | 16 | 28 | 61½ | 42½ | 104 | 42 | 16 | 25 |
| 33 | G. Narayanamma | 25 F | 67 | 74½ | 33½ | 104 | 34 | 16 | 29 | 76 | 39½ | 115½ | 49 | 16 | 25 |
| 34 | C. H. Daudamma | 35 F | 63 | 65½ | 51 | 116½ | 34 | 14 | 23 | 57 | 52 | 109 | 44 | 14 | 25 |
| 35 | K. Kanakamma | 35 F | 44 | 51½ | 61½ | 113 | 22 | 16 | 22 | 46½ | 54 | 80½ | 24 | 16 | 21 |
| 36 | C. H. Rangamma | 30 F | 30 | 62 | 26 | 88 | 16 | 16 | 22 | 23 | 8 | 31 | 5 | 16 | 6 |
| 37 | D. Bhagyamma | 30 F | 18 | 16 | 8 | 24 | 4 | .. | 15 | 65 | 53 | 118 | 41 | .. | 20 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 3577 | 2151 |  |  |

Name of Parishramalaya : Hubli (Distt. Dharwar)

| Serial No. | Name of operative | Class of operative Age-Sex | From 10-3-56 to 27-3-56 | | | | | | | From 28-3-56 to 13-4-56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of days attendance | Duration of work (Hours) | | | Production in hanks | Count of yarn spun | Waste in process (Tolas) | Duration of work (Hours) | | | Production in hanks | Count of yarn spun | Waste in process (Toals) |
| | | | | Carding | Spinning | Total | | | | Carding | Spinning | Total | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Ambutai Kulkarni | 40 F | 80 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 2 | Vanmala Kulkarni | 18 F | 112 | 36½ | 39½ | 76 | 42 | 18 | 14 | 41 | 50 | 91 | 63 | 16 | 19 |
| 3 | Mainabai Kulkarni | 48 F | 123 | 49 | 51 | 100 | 64 | 18 | 21 | 43 | 40 | 83 | 61 | 22 | 19 |
| 4 | Sudhabai Kulkarni | 18 F | 128 | 54½ | 52½ | 107 | 74 | 18 | 24 | 59 | 53 | 102 | 100 | 24 | 30 |
| 5 | Padmawati Navalagund | 28 F | 111 | 74½ | 44 | 91½ | 51 | 20 | 17 | 42 | 44 | 67 | 66 | 20 | 20 |
| 6 | Narasubai Kulkarni | 20 F | 109 | 43½ | 41 | 84½ | 52 | 20 | 17 | 35½ | 39½ | 75 | 52 | 20 | 18 |
| 7 | Radhabai Shalidar | 18 F | 122 | 46½ | 45½ | 92 | 92 | 20 | 29 | 35 | 44 | 79 | 87 | 18 | 30 |
| 8 | Avvakka Koppad | 20 F | 126 | 48½ | 53½ | 102 | 68 | 18 | 21 | 47½ | 54½ | 102 | 80 | 17 | 25 |
| 9 | Sitabai Divate | 30 F | 100 | 49½ | 59 | 108½ | 101 | 16 | 30 | 50 | 67 | 117 | 133 | 16 | 40 |
| 10 | Basavannevva Bhandari | 32 M | 79 | 20½ | 20½ | 41 | 25 | 14 | 71 | .. | .. | .. | .. | .. | .. |
| 11 | Kamalbai Irakal | 25 F | 108 | 51½ | 59½ | 111 | 100 | 18 | 30 | 50½ | 67 | 117½ | 122 | 18 | 40 |
| 12 | Narmadabai Divate | 18 F | 108 | 54½ | 55 | 109½ | 73 | 16 | 22 | 48 | 65½ | 113½ | 92 | 16 | 25 |
| 13 | Leelabai Gudi | 20 F | 117 | 48½ | 53½ | 102 | 68 | 18 | 21 | 47½ | 54½ | 102 | 80 | 17 | 25 |
| 14 | Ramabai Gokuraa | 24 F | 69 | .. | .. | .. | .. | .. | .. | 36½ | 67½ | 104 | 74 | 20 | 26 |
| 15 | Shardabai Bhat | 24 F | 71 | 13 | 18 | 31 | 17 | 18 | 11 | 7 | 15½ | 282½ | 10 | 14 | 4 |
| 16 | Sarlabai Gudi | 18 F | 108 | 46½ | 50½ | 97 | 57 | 18 | 18 | 38 | 49 | 87 | 58 | 16 | 15 |
| 17 | Sarojni Tatki | 20 F | 55 | 38 | 41½ | 79½ | 30 | 14 | 10 | 3½ | —3 | 6½ | 3 | 14 | 14 |
| 18 | Bhimabai Kumthekar | 26 F | 80 | 50 | 54½ | 104½ | 85 | 18 | 25 | 53 | 63 | 116 | 101 | 16 | 39 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Rukminibai Kulkarni | 34F | 79 | 44 | 46 | 90 | 65 | 18 | 19 | 44 | 45½ | 89½ | 68 | 14 | 23 |
| 20 | V. N. Sidamal | 24F | 119 | 39½ | 55 | 94½ | 98 | 20 | 30 | 48½ | 48½ | 97 | 105 | 20 | 13 |
| 21 | S. S. Chanekar | 20F | 116 | 32 | 33½ | 65½ | 49 | 20 | 15 | 29½ | 30½ | 60 | 54 | 20 | 18 |
| 22 | D. V. Chavati | 24F | 79 | 47½ | 53½ | 101 | 53 | 20 | 16 | 29½ | 36 | 65 | 39 | 22 | 13 |
| 23 | Ranganath Joshi | 35M | 99 | 30 | 20½ | 55½ | 41 | 18 | 12 | 23½ | 32½ | 57 | 51 | 20 | 17 |
| 24 | Bhau Mokashi | 30M | 98 | 32½ | 39½ | 72 | 45 | 16 | 13 | 8 | 6½ | 14½ | 5 | 12 | 2 |
| 25 | Dheerendra Gudi | 26M | 115 | 36 | 42 | 78 | 56 | 14 | 17 | 12 | 8½ | 20½ | 18 | 22 | 7 |
| 26 | Chidambar Dabade | 22M | 102 | 33 | 47½ | 80½ | 50 | 18 | 16 | 31½ | 41½ | 73 | 46 | 19 | 16 |
| 27 | Raghvendra Nagaral | 24M | 115 | 52½ | 55½ | 118 | 68 | 20 | 20 | 50 | 60½ | 100½ | 79 | 19 | 26 |
| 28 | Vishnu Mamadapur | 20M | 85 | 49½ | 55½ | 105 | 55 | 16 | 17 | 41 | 62 | 102 | 80 | 18 | 26 |
| 29 | Shreepad Kulkarni | 19M | 88 | .. | .. | .. | .. | .. | .. | 19 | 20½ | 39½ | 28 | 16 | 6 |
| 30 | Verupaksh Kurtkoti | 18M | 111 | 39 | 46½ | 85½ | 57 | 16 | 18 | 38 | 50 | 88 | 45 | 18 | 16 |
| 31 | S. K. Shalawadi | 24M | 97 | 47½ | 46 | 93½ | 55 | 18 | 18 | 39½ | 38 | 78 | 54 | 20 | 16 |
| 32 | H. S. Phappar | 23M | 112 | 49 | 36½ | 85½ | 67 | 18 | 20 | 53½ | 53½ | 107 | 77 | 20 | 27 |
| 33 | C. Raghvendra | 25M | 94 | 35 | 36½ | 71½ | 47 | 18 | 15 | 39 | 38½ | 77½ | 59 | 20 | 20 |
| 34 | S. V. Sardeshpande | 22M | 112 | 55 | 53 | 108 | 75 | 18 | 22 | 54½ | 50½ | 105 | 81 | 20 | 7 |
| 35 | S. G. Joshi | 20M | 108 | 40½ | 43 | 83½ | 47 | 18 | 15 | 54½ | 52½ | 107 | 59 | 18 | 20 |
| 36 | V. N. Joshi | 24M | 105 | 57 | 52 | 109 | 72 | 18 | 21 | 67 | 65½ | 132½ | 69 | 20 | 20 |
| 37 | R. C. Dabade | 24M | 105 | 46½ | 43½ | 90 | 51 | 18 | 18 | 40 | 39 | 79 | 61 | 20 | 17 |
| 38 | S. R. Katti | 20M | 107 | 47 | 45½ | 92½ | 58 | 18 | 15 | 56½ | 44½ | 112 | 114 | 18 | 35 |
| 39 | V.R. Karogal | 24M | 99 | 54½ | 56 | 110½ | 54 | 16 | 16 | 14 | 22 | 36 | 18 | 16 | 6 |
| 40 | N. M. Joshi | 22M | 106 | 50 | 59 | 109 | 50 | 16 | 15 | 58½ | 53 | 111½ | 50 | 18 | 16 |
| 41 | S. C. Gadideppagowda | 20M | 74 | 25½ | 23 | 48½ | 22 | 14 | 7 | 44 | 44 | 88 | 42 | 14 | 14 |
| 42 | Mohan Kulkarni | 18M | 77 | 52½ | 50 | 102½ | 60 | 16 | 18 | 44 | 54 | 98 | 76 | 16 | 25 |
| 43 | V. M. Kenekar | 20M | 91 | 53 | 52 | 105½ | 15 | 14 | 15 | 49½ | 53 | 102½ | 75 | 16 | 25 |
| 44 | J. N. Kulkarni | 30M | 93 | 48½ | 53 | 101½ | 82 | 17 | 24 | 49 | 58 | 107 | 91 | 18 | 28 |
| 45 | Tukaram Naik | 24M | 99 | 44½ | 41 | 65 | 63 | 18 | 18 | 17 | 17 | 31 | 34 | 22 | 2 |
| 46 | Arjun Joshi | 18M | 71 | 45½ | 57 | 102½ | 45 | 15 | 14 | 40½ | 55 | 95½ | 49 | 18 | 17 |
| 47 | Chandrakant Badalkar | 16M | 31 | 53 | 55 | 108 | 44 | 16 | 13 | 55½ | 54½ | 110 | 60 | 16 | 18 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Madhusudan Dudalkar | 16M | 29 | 42½ | 49½ | 92 | 41 | 16 | 12 | 40 | 46½ | 86½ | 52 | 16 | 16 |
| 49 | Madhukar N. Kulkarni | 16M | 29 | 32 | 43½ | 75½ | 28 | 18 | 9 | 34½ | 46 | 80½ | 51 | 20 | 17 |
| 50 | N. G. Kembhavi | 30M | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 51 | Parvati Kosmin | 18F | 90 | 46 | 47½ | 93½ | 47 | 18 | 15 | 48½ | 55½ | 104 | 67 | 18 | 28 |
| 52 | Anusuya Kambar | 24F | 83 | 6 | 6½ | 12½ | 14 | 16 | 4 | 50½ | 55 | 105½ | 102 | 18 | 36 |
| 53 | Prema Amasi | 18F | 108 | 52½ | 54 | 106½ | 73 | 18 | 21 | 49½ | 55½ | 105 | 87 | 18 | 26 |
| 54 | Parvati Dharam | 22F | 106 | 54 | 54½ | 108½ | 68 | 16 | 20 | 50½ | 55½ | 106 | 78 | 20 | 26 |
| 55 | Neelavva Alavandi | 24M | 111 | 47½ | 54½ | 102 | 77 | 18 | 24 | 51½ | 55½ | 107 | 93 | 20 | 26 |
| 56 | Guhma Hulalanni | 48F | 111 | 52½ | 54½ | 107 | 69 | 18 | 20 | 44½ | 54½ | 100 | 78 | 18 | 26 |
| 57 | Vajravu Makhan | 44M | 101 | 50½ | 54 | 104½ | 56 | 18 | 16 | 51½ | 54½ | 106 | 79 | 18 | 27 |
| 58 | Gangavva Hitnal | 52M | 78 | 47 | 50 | 97 | 38 | 17 | 12 | .. | .. | .. | .. | .. | .. |
| 59 | Chandravva Madauabhavi | 40F | 103 | 53½ | 54 | 107½ | 69 | 10 | 20 | 46½ | 56 | 102½ | 92 | 20 | 30 |
| 60 | Phatima Tatagar | 30F | 109 | 52½ | 55 | 107½ | 104 | 18 | 31 | 52 | 56½ | 109 | 127 | 18 | 42 |
| 61 | Rangavva Umakai | 30F | 110 | 51 | 54 | 105 | 65 | 16 | 19 | 48½ | 52 | 100½ | 73 | 16 | 25 |
| 62 | Jannatabu Madewale | 26F | 111 | 52 | 53 | 105 | 62 | 16 | 18 | 43 | 55 | 98 | 74 | 16 | 25 |
| 63 | Prema Teggi | 18F | 103 | 49 | 50 | 99 | 74 | 16 | 23 | 48 | 55½ | 109½ | 89 | 18 | 30 |
| 64 | Kusumavati Jamakhandi | 25F | 101 | 52 | 55 | 107 | 97 | 20 | 30 | 48 | 56 | 104 | 108 | 18 | 36 |
| 65 | Nagawa Shivatagundi | 34F | 92 | 43 | 44½ | 87½ | 43 | 17 | 13 | 48½ | 55 | 103½ | 59 | 17 | 20 |
| 66 | Laxmavva Nazare | 24F | 79 | 13½ | 14½ | 28 | 22 | 18 | 6 | .. | .. | .. | .. | .. | .. |
| 67 | Rindavva Gowdar | 34F | 96 | 52½ | 54½ | 107 | 88 | 20 | 30 | 50 | 56½ | 105½ | 88 | 20 | 28 |
| 68 | Radhavva Malvade | 18F | 96 | 54½ | 55½ | 100 | 98 | 22 | 31 | 52½ | 55½ | 109 | 138 | 22 | 46 |
| 69 | Savakka Hnnasyal | 18F | 92 | 69½ | 37 | 106½ | 71 | 20 | 20 | 43 | 50½ | 93½ | 67 | 20 | 22 |
| 70 | Onkarevva Kundavagi | 18F | 90 | 38 | 39½ | 77½ | 51 | 18 | 15 | 48½ | 55 | 103½ | 88 | 18 | 27 |
| 71 | Channavva Mudagal | 26F | 96 | 53 | 53½ | 100½ | 89 | 16 | 26 | 51 | 55½ | 106½ | 99 | 16 | 34 |
| 72 | Neelovva Diwati | 28F | 99 | 53½ | 53½ | 107 | 48 | 16 | 15 | 45½ | 55 | 100½ | 70 | 16 | 23 |
| 73 | Sumitra Sagar | 18F | 89 | 51½ | 55 | 106½ | 89 | 17 | 30 | 52½ | 56 | 108½ | 106 | 17 | 35 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74 | Janavva Keware | 30F | 80 | 54 | 54½ | 108½ | 83 | 18 | 25 | 49 | 55½ | 104½ | 97 | 18 | 32 |
| 75 | Annapurna Rittimath | 18F | 84 | 46½ | 49 | 95½ | 46 | 16 | 15 | 45½ | 54½ | 100 | 61 | 16 | 20 |
| 76 | Tulasavva Malawade | 32F | 60 | 50½ | 53½ | 104 | 78 | 16 | 24 | 51 | 53 | 104 | 87 | 18 | 29 |
| 77 | Lilabai Tambe | 18F | 93 | 52 | 55 | 107 | 92 | 18 | 28 | 50 | 55½ | 105½ | 109 | 18 | 35 |
| 78 | Yasoda Diwate | 18F | 92 | 45½ | 47½ | 93 | 77 | 16 | 24 | 52½ | 108½ | 108 | 100 | 18 | 30 |
| 79 | Subbadra Atadakar | 18F | 76 | 52 | 54½ | 106½ | 93 | 16 | 28 | 51 | 55½ | 106½ | 93 | 16 | 80 |
| 80 | Shankarva Guttal | 16F | 45 | 3 | 3½ | 6½ | 80 | 16 | 3 | .. | .. | .. | .. | .. | .. |
| 81 | Subhdra Shelawadi | 16F | 56 | 52 | 54½ | 106½ | 88 | 18 | 27 | 53 | 109 | 109 | 111 | 18 | 33 |
| 82 | Alla Kamadolli | 22F | 56 | 52 | 54 | 106 | 47 | 12 | 15 | 48 | 22½ | 70½ | 59 | 18 | 20 |
| 83 | Yellavva Hanbal | 42F | 54 | 46½ | 48 | 9½ | 56 | 16 | 17 | 44½ | 54 | 109½ | 75 | 18 | 22 |
| 84 | Laxmavva Hadagali | 18F | 47 | 22½ | 23 | 45½ | 31 | 16 | 9 | 43½ | 54½ | 100 | 85 | 16 | 26 |
| 85 | Kamalavva Bagade | 20F | 52 | 46 | 45 | 91 | 54 | 16 | 16 | 47 | 50½ | 97½ | 67 | 16 | 23 |
| 86 | Imambu Bepani | 25F | 53 | 46½ | 48 | 94½ | 61 | 16 | 18 | 44½ | 53½ | 98 | 76 | 20 | 23 |
| 87 | Marembu Nadaf | 30F | 52 | 44 | 47½ | 91½ | 52 | 15 | 15 | 39½ | 52 | 90 | 55 | 18 | 16 |
| 88 | Sitabai Kulkarni | 26F | 48 | 29 | 30 | 59 | 31 | 16 | 10 | 43 | 52½ | 95½ | 65 | 16 | 15 |
| 89 | Luxmibai Oujar | 40F | 48 | 27 | 29½ | 56½ | 33 | 17 | 11 | 51 | 25 | 76 | 61 | 16 | 22 |
| 90 | Kamalabai Naik | 38F | 41 | 23½ | 25 | 48½ | 23 | 16 | 8 | 38 | 43 | 81 | 54 | 17 | 16 |
| 91 | Padmbai Patil | 42F | 50 | 44 | 42½ | 86½ | 40 | 16 | 12 | 41½ | 28½ | 70 | 51 | 15 | 15 |
| 92 | Ambutai Shirasangi | 18F | 51 | 44 | 42 | 86 | 35 | 12 | 10 | 40 | 50 | 90 | 43 | 14 | 13 |
| 93 | Talasakka Paste | 18F | 49 | 39 | 40 | 79 | 38 | 15 | 12 | 47½ | 50 | 97½ | 58 | 16 | 17 |
| 94 | Yellavva Pashupatihal | 18F | 34 | 41 | 38 | 79 | 56 | 16 | 17 | 51½ | 54 | 105½ | 90 | 18 | 27 |
| 95 | Parvateva Atadekar | 16F | .. | 45 | 45½ | 90½ | 41 | 16 | 11 | .. | .. | .. | .. | .. | .. |
| 96 | Padmabi Alur | 16F | 49 | 44½ | 34 | 78½ | 60 | 16 | 19 | 25½ | 46½ | 72 | 51 | 20 | 15 |
| 97 | Janakibai Hitnal | 28F | 47 | 34½ | 34 | 68½ | 60 | 16 | 21 | 37 | 57½ | 94½ | 54 | 18 | 19 |
| 98 | Veeravva Jalaji | 42F | 46 | 23 | 32 | 60 | 29 | 16 | 10 | 47½ | 52 | 99½ | 49 | 18 | 15 |
| 99 | Shantabai Kulkarni | 40F | 49 | 46½ | 45½ | 92 | 51 | 15 | 15 | 41½ | 54 | 95½ | 64 | 19 | 19 |
| 100 | Leelabai Mantar | 16F | 48 | 30½ | 33½ | 64 | 24 | 17 | 8 | 45½ | 55 | 100½ | 37 | 20 | 12 |
| 101 | Lalitabai Nelvagi | 18F | 49 | 41½ | 44½ | 86 | 51 | 16 | 15 | 46 | 54½ | 100½ | 74 | 18 | 25 |
| 102 | Parvatevva Hosatti | 20F | 47 | 45 | 47 | 92 | 60 | 17 | 18 | 31 | 36 | 67 | 50 | 18 | 17 |
| 103 | G wravva Maladar | 25F | 45 | 47 | 43½ | 90½ | 31 | 15 | 9 | 37 | 41½ | 78½ | 34 | 1 | 11 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 104 | Dyamavva Maladar | 22F | 45½ | 4½ | 6½ | 11 | 4 | 12 | 1 | .. | .. | .. | .. | .. | .. |
| 105 | Godavva Guttal | 18F | 42 | 42½ | 39 | 81½ | 39 | 15 | 12 | 43 | 49½ | 92½ | 50 | 20 | 12 |
| 106 | Nadeema Nadaf | 24F | 19 | 18 | 18 | 36 | 15 | 16 | 5 | .. | .. | .. | .. | .. | .. |
| 107 | Shankutlabai Bandish | 22F | 43 | 43 | 46 | 89 | 37 | 15 | 9 | 40 | 52 | 92 | 51 | 18 | 17 |
| 108 | Sarujini Bijaour | 16F | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 109 | Ranganath Tatti | 30M | .. | 65½ | 77 | 142½ | 45 | 14 | 28 | .. | .. | .. | .. | .. | .. |
| 110 | Seetavva Kosatti | 18F | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 111 | Hanamanta Kulkarni | 16M | 52 | .. | . | .. | .. | .. | .. | 42½ | 49½ | 92 | 49 | 16 | 16 |
| 112 | Gangavva Bagade | 18F | .. | 39½ | 38½ | 78 | 37 | 15 | 10 | 42½ | 54 | 96½ | 67 | 18 | 12 |
| 113 | Krishinabai Joshi | 32F | 37 | 42½ | 46 | 88½ | 44 | 16 | 25 | 38½ | 53 | 91½ | 52 | 20 | 81 |
| 114 | Tulsibai Paribandl | 40F | 39 | 33½ | 41 | 74½ | 39 | 18 | 24 | 34 | 45 | 79 | 53 | 18 | 14 |
| 115 | Fakam Kamadatti | 18M | 35 | 39½ | 34½ | 74 | 26 | 19 | 10 | 37 | 46½ | 88½ | 37 | 16 | 10 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 9289 | 7097 |  |  |

Name of Parishramalaya : Ambar Charkha Parishramalaya;
Anekal (Bangalore District)
KARNATAK

| Serial No. | Name of operative | Class of operative Age-sex | No. of days of attendance | From 10-3-1956 to 27-3-1956 Duration of work (Hours) Carding | Spg. | Total | Production in hanks | Count of yarn spun | Waste in process (Tolas) | From 28-3-1956 to 13-4-1956 Duration of work (Hours) Carding | Spg. | Total | Production in hanks | Count of yarn spun | Waste in process (Tolas) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1. | Andalamma | 35 F | 38 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 2. | Prabhavatamma | 32 F | 74 | 19½ | 27 | 46½ | 22 | 10 | 38 | 17 | 20 | 37 | 9 | 8 | 14 |
| 3. | Veeramma | 28 F | 72 | 41 | 47 | 88 | 65 | 18 | 68 | 51 | 9½ | 60½ | 12 | 18 | 9 |
| 4. | Rudramma | 18F | 72 | 41 | 47 | 88 | 64 | 18 | 65 | 5 | 9½ | 14½ | 12 | 20 | 7 |
| 5. | Kankanmma | 30 F | 87 | 41 | 42½ | 83½ | 37 | 13 | 47 | 37 | 40½ | 78½ | 45 | 20 | 22 |
| 6. | Srimathi | 18 F | 90 | 40½ | 42½ | 84½ | 44 | 16 | 51 | 38 | 41 | 79 | 42 | 16 | 36 |
| 7. | Sarojmma T. R. | 22 F | 93 | 26 | 43½ | 69½ | 43 | 11 | 31 | 20 | 32½ | 52½ | 46 | 15 | 15 |
| 8. | Kamalamma K. | 18 F | 90 | 26 | 43 | 69½ | 45 | 11 | 31 | 20 | 33 | 53 | 24 | 15 | 21 |
| 9. | Kamalakshmaa | 20 F | 72 | 43½ | 36½ | 80 | 38 | 13 | 49 | 33 | 39 | 72 | 36 | 17 | 28 |
| 10. | Indiramma | 18 F | 89 | 43½ | 36½ | 80 | 47 | 16 | 51 | 32 | 39½ | 72 | 38 | 16 | 30 |
| 11. | Jayamma T. | 18 F | 88 | 37½ | 42½ | 80 | 45 | 16 | 49 | 47 | 46 | 73 | 56 | 20 | 34 |
| 12. | Vasamtamma P. | 18 F | 95 | 33 | 42½ | 80½ | 44 | 16 | 51 | 38 | 36 | 74 | 57 | 20 | 36 |
| 13. | Najamma | 18 F | 21 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 14. | Santamma | 18 F | 89 | 14½ | 52 | 66½ | 41 | 17 | 43 | 37½ | 40 | 77½ | 33 | 12 | 31 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15. | Gouramma | 19 F | 89 | 38½ | 41 | 79½ | 55 | 20 | 49 | 30 | 39 | 69 | 60 | 20 | 40 |
| 16. | Kankamma/Sushalamma | 18 F | 91 | 39 | 41 | 80 | 53 | 20 | 44 | 30 | 39 | 69 | 53 | 20 | 32 |
| 17. | Lalitma | 35 F | 21 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 18. | Venkatamma | 40 F | 21 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 19. | Vishlakshamma A. V. | 18 F | 86 | 23 | 50 | 73 | 48 | 13 | 65 | 26½ | 34 | 60½ | 22 | 20 | 15 |
| 20. | Putalakshamma | 18 F | 75 | 23 | 50 | 73 | 17 | 12 | 26 | 27 | 35 | 62 | 40 | 14 | 40 |
| 21. | Venkatamma S. | 30 F | 70 | 33 | 43 | 76 | 35 | 13 | 49 | 31 | 34½ | 65½ | 25 | 14 | 24 |
| 22. | Rajaamma K. | 18 F | 97 | 33½ | 43 | 76½ | 57 | 13 | 74 | 31 | 34½ | 65½ | 70 | 17 | 57 |
| 23. | Raggamma | 35 F | 81 | 23 | 39 | 62 | 31 | 16 | 34 | 22½ | 29½ | 52 | 32 | 16 | 26 |
| 24. | Suramma | 40 F | 83 | 23 | 39 | 62 | 39 | 13 | 49 | 22½ | 29½ | 52 | 31 | 19 | 21 |
| 25. | Darvatamma M. V. | 35 F | 88 | 15½ | 52 | 67½ | 34 | 16 | 37 | 37 | 40½ | 77½ | 35 | 16 | 30 |
| 26. | Venkttlakshmma | 35 F | 21 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 27. | Ballamma | 20 F | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 28. | Yelamma | 19 F | 71 | 34½ | 14½ | 49 | 16 | 16 | 16 | .. | .. | .. | .. | .. | .. |
| 29. | Tungamma | 20 F | 77 | 28½ | 32½ | 61 | 34 | 16 | 38 | 24½ | 25½ | 50 | 16 | 16 | 14 |
| 30. | Lakshyamma | 20 F | 85 | 29 | 32½ | 61½ | 45 | 16 | 38 | 24½ | 25½ | 50 | 34 | 14 | 32 |
| 31. | Saradamma | 22 F | 71 | 45 | 14½ | 49½ | 40 | 16 | 15 | 24 | 22½ | 46½ | 43 | 15 | 37 |
| 32. | Papamma | 22 F | 34 | 19½ | 27½ | 47 | 18 | 16 | 20 | 17 | 21 | 38 | 32 | 15 | 29 |
| 33. | Bokkamma G. | 42 | 98 | 39 | 43 | 82 | 61 | 16 | 93 | 51½ | 34 | 85 | 54 | 20 | 37 |
| 34. | Ramaya N. | 42 M | 16 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 35. | Satyanarana P.. | 20 M | 91 | 26 | 40½ | 66½ | 39 | 20 | 69 | 54 | 37½ | 97 | 77 | 20 | 55 |
| 36. | Sreenivasaiah | 24 M | 97 | 26 | 41 | 67 | 93 | 20 | 29 | 54 | 37½ | 91½ | 71 | 19 | 50 |
| 37. | Rajgopalsharma | 22 M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 38. | V. Harayan | 19 M | 99 | 45½ | 44½ | 90 | 65 | 16 | 78 | 55 | 34 | 89 | 68 | 16 | 57 |
| 39. | A. V. Muniveerappa | 18 M | 91 | 48½ | 43½ | 92 | 58 | 19 | 59 | 52½ | 31½ | 84 | 33 | 20 | 21 |
| 40. | S. Gopalkrishna | 19M | 55 | 41½ | 46 | 97½ | 68 | 20 | 65 | 10 | 6½ | 16½ | 18 | 12 | 16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41. | H. S. Satyanarayan | 19M | 7 | | | | | | | | | | | | |
| 42. | Krishnappa Y. P. | 18M | 93 | 45½ | 44½ | 90 | 58 | 14 | 73 | 55 | 34 | 89 | 48 | 14 | 42 |
| 43. | Krishnaswamy C. S. | 36M | 86 | 31 | 39½ | 70½ | 46 | 13 | 56 | 58½ | 38½ | 97 | 62 | 18 | 48 |
| 44. | Jayaram | 32M | 71 | 31 | 39½ | 71½ | 9 | 10 | 15 | .. | .. | .. | .. | .. | .. |
| 45. | Bhavanishanka C. R. | 40M | 75 | 40 | 34½ | 74½ | 52 | 17 | 59 | 40 | 25½ | 65½ | 37 | 16 | 31 |
| 46. | Gururajrao | 18M | 82 | 40 | 45 | 75 | 46 | 14 | 44 | 40 | 26 | 66 | 46 | 17 | 34 |
| 47. | Puttaiah C.K. | 38M | 19 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48. | Shivamma K.P. | 24F | 19 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 49. | Rachappa B. | 19M | 76 | 39 | 43 | 82 | 60 | 19 | 109 | 51½ | 33 | 84½ | 64 | 20 | 47 |
| 50. | Krishnappa R. | 20M | 68 | 35½ | 32 | 67½ | 46 | 13 | 61 | 46 | 23 | 69 | 46 | 14 | 40 |
| 51. | Jailendra | 18M | 64½ | 35½ | 22½ | 56½ | 27 | 12 | 43 | 46 | 25 | 71 | 44 | 15 | 36 |
| 52. | Vishwakarma H.M. | 32M | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 53. | Balkrishna T. | 39M | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 54. | Venkatcholaiah | 24M | 56 | 48½ | 43½ | 92 | 57 | 16 | 67 | 52½ | 31½ | 84 | 72 | 18 | 54 |
| 55. | H. S. Neelkantaiah | 22M | 48 | 54 | 47 | 101 | 60 | 19 | 74 | 64½ | 40½ | 105 | 62 | 18 | 51 |
| 56. | B. Sivanna | 22M | 49 | 54 | 47 | 101 | 59 | 19 | 74 | 64½ | 41 | 105½ | 62 | 18 | 51 |
| 57. | Narayanappa | 22M | 46 | 57½ | 45 | 102½ | 49 | 12 | 77 | 73 | 45 | 118 | 61 | 17 | 53 |
| 58. | Kamplingaya | 20M | 48 | 57 | 45 | 102 | 49 | 12 | 77 | 74 | 45 | 119 | 62 | 17 | 52 |
| 59. | Veerhaiah | 40M | 43 | 51½ | 41½ | 93 | 27 | 14 | 40 | 86½ | 40½ | 117 | 30 | 15 | 26 |
| 60. | Muniswamaiya | 20M | 44 | 51½ | 42 | 93½ | 26 | 14 | 40 | 56½ | 31 | 87½ | 30 | 15 | 26 |
| 61. | A. Rahamtulla Sharaj | 18M | 40 | 52 | 49½ | 91½ | 30 | 13 | 48 | 52½ | 28½ | 81 | 37 | 18 | 29 |
| 62. | A. Sabjan | 20M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 63. | Daddannappa | 18M | 40 | 43 | 34½ | 77½ | 28 | 14 | 46 | 47½ | 25½ | 73 | 28 | 14 | 25 |
| 64. | Sarna Annappa | 22 | 31 | 43 | 35 | 78 | 29 | 14 | 45 | 47½ | 25½ | 73 | 28 | 14 | 25 |
| 65. | Hajantulla Sharif | 18M | 40 | 57 | 47½ | 104½ | 50 | 16 | 73 | 66 | 46 | 102 | 51 | 15 | 46 |
| 66. | Bainna | 18M | 40 | 57 | 67½ | 124½ | 50 | 16 | 73 | 57 | 37 | 94 | 51 | 15 | 46 |
| 67. | Balappa | 18M | 39 | 55 | 45 | 100 | 37 | 14 | 61 | 68 | 34 | 102 | 47 | 15 | 45 |
| 68. | Pattabhi | 18M | 36 | 65 | 44 | 99½ | 36 | 14 | 61 | 68 | 45 | 103 | 48 | 16 | 43 |
| 69 | Nanjappa | 18M | 14 | 44 | 35 | 80 | 9 | 8 | 23 | .. | .. | .. | .. | .. | .. |
| 70. | Krishnappa T R. | 18M | 29 | 44 | 45½ | 79½ | 33 | 10 | 82 | 49½ | 13½ | 80 | 41 | 10 | 45 |

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71. | S. Ramamoorti . . . | 18M | 28 | 82 | 40 | 120 | 30 | 13 | 48 | 52½ | 29 | 81½ | 46 | 16 | 29 |
| 72. | Jayamma . . . . | 20M | 47 | 48 | 46 | 94 | 29 | 11 | 56 | 47 | 35 | 82 | 34 | 11 | 42 |
| 73. | Sittamma . . . . | 35M | 45 | 48 | 46 | 94 | 29 | 11 | 56 | 47 | 35 | 82 | 35 | 13 | 40 |
| 74. | Venkatamma . . . . | 30F | 46 | 44½ | 30½ | 65 | 19 | 11 | 40 | 45 | 42 | 87 | 30 | 10 | 43 |
| 75. | Sittamma . . . . | 30F | 35 | 34 | 30½ | 64½ | 18 | 10 | 40 | 45 | 42 | 87 | 29 | 10 | 42 |
| 76. | Ponnatai . . . | 35F | 43 | 41½ | 34 | 75½ | 22 | 10 | 45 | 41 | 34 | 75 | 30 | 12 | 34 |
| 77 | Jayamma R. . . . . | 19F | 37 | 41½ | 34 | 75½ | 22 | 110 | 45 | 41 | 38 | 79 | 31 | 13 | 32 |
| 78 | Girijamma . . . | 40F | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 79 | Kantamma . . . . | 18F | 40 | 50 | 42½ | 92½ | 30 | 13 | 51 | 37½ | 34½ | 72 | 29 | 15 | 26 |
| 80. | Ramakka . . . . | 28F | 43 | 50 | 44 | 94 | 30 | 13 | 56 | 39 | 37½ | 76½ | 33 | 13 | 34 |
| 81. | Akkajamma . . . . | 26F | 39 | 50½ | 43½ | 94 | 29 | 13 | 54 | 39 | 37½ | 76½ | 31 | 13 | 34 |
| 82. | Lalitamma . . . . | 27F | 20 | 12 | 13½ | 26½ | 6 | 8 | 15 | .. | .. | .. | .. | .. | .. |
| 83. | Lakshyamma . . . . | 26F | 20 | 13 | 13½ | 26½ | 6 | 8 | 15 | .. | .. | .. | .. | .. | .. |
| 84. | A. Chamma . . . . | 25F | 9 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 85. | Jaylakshyamma . . . . . | 18F | 40 | 46 | 40 | 86 | 22 | 10 | 45 | 49 | 43 | 92 | 31 | 8 | 40 |
| 86. | Bharatamma . . . . | 18F | 43 | 42 | 43½ | 85½ | 34 | 14 | 55 | 49 | 39½ | 88½ | 40 | 14 | 37 |
| 87. | Subbamma . . . . | 19F | 38 | 42 | 43½ | 85½ | 33 | 14 | 55 | 47 | 39½ | 86½ | 38 | 15 | 37 |
| 88. | Kaveramma . . . . | 25F | 40 | 43½ | 37½ | 81 | 28 | 9 | 54 | 47 | 36½ | 80½ | 31 | 12 | 36 |
| 89. | Samtamma . . . . | 20F | 35 | 50 | 42½ | 92½ | 29 | 13 | 48 | 344½ | 34½ | 79 | 28 | 14 | 25 |
| 90. | Suselamma . . . . | 21F | 34 | 43½ | 37½ | 81 | 29 | 13 | 51 | 37½ | 56½ | 94 | 32 | 13 | 35 |
| 91. | Ammaiyamma . . . . . | 24F | 17 | 20 | 18½ | 38½ | 12 | 8 | 33 | .. | .. | .. | .. | .. | .. |
| 92. | Jahannussa . . . . | 35F | 39 | 49½ | 18½ | 68 | 19 | 10 | 42 | 44½ | 49½ | 84 | 26 | 10 | 42 |
| 93. | Zaharabi . . . . | 30F | 29 | 49½ | 43 | 92½ | 19 | 10 | 42 | 44½ | 49½ | 94 | 24 | 10 | 44 |
| 94. | Rangamma . . . . | 25F | 37 | 46 | 43 | 89 | 23 | 11 | 46 | 49 | 43 | 92 | 31 | 10 | 40 |
| 95. | Suselemma H. . . . . . | 18F | 5 | 20 | 40 | 16 | .. | .. | .. | 44½ | 49½ | 84 | .. | .. | .. |
| | TOTAL | | | | | | | | | | | 5625 | 2890 | | |

Name of Parishramalayas Kusiapal
P.O. Kusiapal Distt.
Cuttak, Orissa. (Utkal)

(23)

Date of starting 4-2-56
Number of Charkha sets : 58

| S. No. | Name of operative | Class of spinner Age-sex | No. of days of attend-ance | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Raghabananda Sahu . . . | 28 M | 46 | 64 | 128 | 74 | 20 | 70 | 68 | 68 | 136 | .. | .. | .. | .. |
| 2 | Gourhari Dhall . . . | 35 M | 36 | 24 | 24 | 48 | 35 | 20 | 33 | 68 | 68 | 136 | 80 | 20 | 75 |
| 3 | Gourhari Radhan . . . | 21 M | 45 | 58 | 58 | 116 | 24 | 15 | 25 | 68 | 68 | 136 | 41 | 15 | 38 |
| 4 | Duryodhan Pradhan . . | 20 M | 44 | 56 | 56 | 112 | 24 | 15 | 25 | 68 | 68 | 136 | 41 | 15 | 38 |
| 5 | Fitashar Pradhon . . . | 20 M | 38 | 52 | 52 | 104 | 15 | 13 | 15 | 52 | 52 | 104 | 22 | 11 | 20 |
| 6 | Bhagabat Swain . . . | 19 M | 21 | 36 | 36 | 72 | 15 | 130 | 14 | .. | .. | .. | .. | .. | .. |
| 7 | Dolagobind Panda . . . | 19 M | 46 | 64 | 64 | 128 | 39 | 150 | 37 | 68 | 68 | 136 | 58 | 16 | 56 |
| 8 | Dinabandhua Sahu . . . | 50 M | 46 | 64 | 64 | 128 | 39 | 15 | 39 | 68 | 68 | 136 | 58 | 16 | 55 |
| 9 | Ganeshwar Sahu . . . | 35 M | 46 | 64 | 64 | 128 | 47 | 17 | 45 | 68 | 68 | 136 | 55 | 18 | 53 |
| 10 | Satyauarayan Das . . . | 18 M | 43 | 62 | 62 | 124 | 24 | 14 | 20 | 58 | 58 | 116 | 35 | 14 | 33 |
| 11 | Banamali Machantry . . | 33 M | 46 | 64 | 64 | 128 | 41 | 16 | 35 | 68 | 68 | 136 | 47 | 16 | 42 |
| 12 | Jagannath Sarangi . . . | 20 M | 46 | 64 | 64 | 128 | 41 | 16 | 36 | 68 | 68 | 136 | 47 | 16 | 43 |
| 13 | Rana Chandra Barik . . . | 19 M | 43 | 56 | 56 | 112 | 32 | 16 | 20 | 64 | 64 | 128 | 59 | 15 | 46 |
| 14 | Bidyadhar Jona . . . . | 20 M | 32 | 16 | 16 | 32 | 6 | 16 | 6 | 60 | 60 | 120 | 48 | 16 | 40 |
| 15 | Dishan Charan . . . | 18 M | 42 | 54 | 54 | 108 | 19 | 13 | 19 | 62 | 62 | 124 | 37 | 16 | 35 |
| 16 | Krishna Ch. Sethi . . . | 34 M | 42 | 54 | 54 | 108 | 19 | 13 | 19 | 62 | 62 | 124 | 37 | 16 | 34 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Jayader Beherai . . . | 19 M | 40 | 64 | 64 | 128 | 16 | 13 | 17 | 44 | 44 | 88 | 17 | 13 | 15 |
| 18 | Bishan Charan Pani . . . | 22 M | 31 | 50 | 50 | 100 | 18 | 13 | 19 | 22 | 22 | 44 | 12 | 9 | 13 |
| 19 | Bhahagrahi Sahu . . . | 28 M | 17 | 22 | 22 | 44 | 5 | 13 | 7 | .. | .. | .. | .. | .. | .. |
| 20 | Antarayani Sahu . . . | 22 M | 46 | 62 | 62 | 124 | 37 | 15 | 40 | 68 | 68 | 136 | 57 | 17 | 49 |
| 21 | Habakrishna Perida . . . | 42 M | 11 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 22 | Krishna Ch. Day . . . | 19 M | 43 | 64 | 64 | 128 | 22 | 14 | 20 | 56 | 56 | 112 | 40 | 14 | 38 |
| 23 | Gopal Ch. Sahu . . . | 18 M | 14 | 56 | 56 | 112 | 16 | 13 | 16 | .. | .. | .. | .. | .. | .. |
| 24 | Mana Gobini Parida . . . | 19 M | 45 | 58 | 58 | 116 | 39 | 16 | 37 | 68 | 68 | 136 | 71 | 19 | 68 |
| 25 | Damodar Parida . . . | 19 M | 43 | 56 | 56 | 112 | 39 | 16 | 39 | 64 | 64 | 128 | 71 | 19 | 68 |
| 26 | Prahallad Swain . . . | 23 M | 46 | 64 | 64 | 128 | 45 | 16 | 40 | 68 | 68 | 136 | 60 | 17 | 55 |
| 27 | Ganesh Ch. Parida . . . | 22 M | 46 | 64 | 64 | 128 | 45 | 16 | 40 | 68 | 68 | 136 | 60 | 17 | 55 |
| 28 | Gobind Ch. Sahu . . . | 25 M | 45 | 64 | 64 | 128 | 37 | 17 | 35 | 64 | 64 | 128 | 56 | 16 | 53 |
| 29 | Brindabhan Mohantry . . | 24 M | 46 | 62 | 62 | 124 | 37 | 17 | 34 | 68 | 68 | 136 | 53 | 16 | 50 |
| 30 | Bhimeanan Sahu . . . | 18 M | 16 | 24 | 24 | 48 | 5 | 15 | 8 | .. | .. | .. | .. | .. | .. |
| 31 | Natbar Sahu . . . . | 19 M | 41 | 60 | 60 | 120 | 18 | 16 | 15 | 52 | 52 | 104 | 28 | 18 | 40 |
| 32 | Shyan Sundar Bohra . . . | 30 M | 45 | 62 | 62 | 124 | 28 | 15 | 34 | 64 | 64 | 128 | 41 | 16 | 35 |
| 33 | Nrusingha Ch. Lanka . . | 20 M | 19 | 28 | 28 | 56 | 60 | 14 | 5 | .. | .. | .. | .. | .. | .. |
| 34 | Binoygopal Das . . . | 15 M | 46 | 64 | 64 | 128 | 35 | 17 | 34 | 68 | 68 | 136 | 48 | 16 | 42 |
| 35 | Dharandhar Kabi . . . | 30 M | 45 | 60 | 60 | 120 | 52 | 17 | 50 | 68 | 68 | 136 | 67 | 14 | 61 |
| 36 | Ajodhya Dei . . . . | 19 M | 39 | 64 | 64 | 128 | 35 | 18 | 29 | 40 | 40 | 80 | 15 | 16 | 13 |
| 37 | Narokrishna Patra . . . | 17 M | 31 | 20 | 20 | 12 | 17 | 11 | 52 | 52 | 52 | 104 | 55 | 13 | 52 |
| 38 | Gobind Sahu . . . . | 21 M | 45 | 62 | 62 | 124 | 17 | 14 | 14 | 66 | 66 | 132 | 43 | 15 | 40 |
| 39 | Khirod Nath . . . | 19 M | 41 | 46 | 46 | 92 | 18 | 12 | 15 | 64 | 64 | 128 | 95 | 12 | 94 |
| 40 | Satyananda Hotta . . . | 27 M | 35 | 28 | 28 | 56 | 7 | 12 | 14 | 58 | 58 | 116 | 53 | 15 | 50 |
| 41 | Sachidannanda Sanal . . . | 23 M | 19 | 28 | 28 | 56 | 8 | 14 | 7 | .. | .. | .. | .. | .. | .. |
| 42 | Balaran Pande . . . | 20M | 45 | 62 | 62 | 124 | 49 | 20 | 35 | 68 | 68 | 136 | 67 | 19 | 62 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43 | Mirslidhan Nayak | 16 M | 38 | 62 | 62 | 124 | 24 | 14 | 20 | 38 | 38 | 76 | 14 | 16 | 13 |
| 44 | Delegobind Sahu | 20 M | 46 | 62 | 62 | 124 | 49 | 24 | 31 | 68 | 68 | 136 | 67 | 19 | 66 |
| 45 | Murail Behore | 18 M | 38 | 62 | 62 | 124 | 28 | 14 | 25 | 38 | 38 | 76 | 21 | 14 | 18 |
| 46 | Jogandra Sahu | 28 M | 30 | 60 | 60 | 120 | 38 | 14 | 38 | 40 | 40 | 80 | 21 | 19 | 17 |
| 47 | Maghu Sahu | 18 M | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Mouranga Pande | 16 M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 49 | Akuli Charan Jena | 21 M | 46 | 62 | 62 | 124 | 40 | 12 | 36 | 68 | 68 | 136 | 57 | 15 | 35 |
| 50 | Smt. Janki Bewra | 22 F | 46 | 64 | 64 | 128 | 60 | 20 | 58 | 68 | 68 | 136 | 134 | 19 | 124 |
| 51 | Adikanda Rout | 22 M | 17 | 16 | 16 | 32 | 4 | 12 | 5 | .. | .. | .. | .. | .. | .. |
| 52 | Smt. S. Kunda | 35 F | 46 | 64 | 64 | 128 | 34 | 18 | 30 | 68 | 68 | 136 | 34 | 15 | 30 |
| 53 | Smt. Surama Nath | 18 F | 46 | 64 | 64 | 128 | 54 | 17 | 53 | 68 | 68 | 136 | 75 | 18 | 70 |
| 54 | Smt. Lakshmi Nath | 16 F | 46 | 64 | 64 | 128 | 54 | 17 | 32 | 68 | 68 | 136 | 75 | 18 | 74 |
| 55 | Smt. Subhadra Devi | 37 F | 39 | 52 | 52 | 104 | 36 | 15 | 32 | 52 | 52 | 104 | 49 | 15 | 46 |
| 56 | Smt. Dukhi Devi | 30 F | 46 | 64 | 64 | 123 | 33 | 14 | 33 | 68 | 68 | 136 | 32 | 14 | 30 |
| 57 | Smt. Gurubari Devi | 25 F | 39 | 64 | 64 | 128 | 25 | 15 | 24 | 40 | 40 | 80 | 30 | 15 | 30 |
| 58 | Smt. Ped Devi | 27 F | 46 | 64 | 64 | 128 | 29 | 12 | 26 | 68 | 68 | 136 | 43 | 14 | 41 |
| 59 | Smt. Indumati Devi | 30 F | 46 | 64 | 64 | 128 | 29 | 12 | 26 | 68 | 68 | 136 | 43 | 14 | 41 |
| 60 | Smt. Sasibala Devi | 16 F | 29 | 48 | 48 | 96 | 25 | 17 | 23 | 66 | 66 | 132 | 34 | 14 | 33 |
| 61 | Smt. Sala Devi | 34 F | 15 | 8 | 8 | 16 | 5 | 14 | 9 | .. | .. | .. | .. | .. | .. |
| 62 | Smt. Sita Devi | 28 F | 46 | 64 | 64 | 128 | 38 | 10 | 32 | 68 | 68 | 136 | 51 | 15 | 48 |
| 63 | Smt. Rodani Dei | 20 F | 40 | 64 | 64 | 128 | 22 | 10 | 22 | 44 | 44 | 88 | 13 | 12 | 12 |
| 64 | Smt. Sabitri Devi | 26 F | 47 | 64 | 64 | 128 | 45 | 15 | 20 | 68 | 68 | 136 | 64 | 16 | 20 |
| 65 | Smt. Gita Devi | 17 F | 47 | 64 | 64 | 128 | 45 | 15 | 20 | 68 | 68 | 136 | 64 | 14 | 20 |
| 66 | Smt. Susama Dei | 26 F | 47 | 64 | 64 | 128 | 39 | 15 | 20 | 68 | 68 | 136 | 58 | 15 | 20 |
| 67 | Smt. Sakhi Dei | 15 F | 47 | 64 | 64 | 136 | 40 | 15 | 20 | 68 | 68 | 136 | 58 | 15 | 20 |
| 68 | Smt. Dukhi Dei | 30 F | 47 | 64 | 64 | 136 | 39 | 13 | 20 | 68 | 68 | 136 | 55 | 14 | 20 |
| 69 | Smt. Subhedra Dei | 15 F | 47 | 64 | 64 | 136 | 40 | 14 | 20 | 68 | 68 | 136 | 55 | 14 | 20 |
| 70 | Smt. Malti Dei | 35 F | 27 | 52 | 25 | 104 | 18 | 13 | 10 | .. | .. | .. | .. | .. | .. |
| 71 | Smt. Labani Dei | 45 F | 47 | 64 | 64 | 128 | 23 | 13 | 15 | 68 | 68 | 136 | 25 | 14 | 10 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | Smt. Sarojan Devi . . . | 15 F | 32 | 60 | 60 | 120 | 25 | 13 | 15 | 68 | 68 | 136 | 31 | 14 | 15 |
| 73 | Smt. Janhana Devi . . . | 35 F | 47 | 64 | 64 | 128 | 25 | 13 | 15 | 68 | 68 | 136 | 36 | 15 | 15 |
| 74 | Smt. Kanka Dei . . . | 40 F | 47 | 64 | 64 | 128 | 27 | 14 | 15 | 68 | 68 | 136 | 35 | 15 | 15 |
| 75 | Smt. Ujlani Dei . . . | 35 F | 47 | 64 | 64 | 128 | 40 | 13 | 20 | 68 | 68 | 136 | 61 | 16 | 20 |
| 76 | Smt. Sulokhana Dei . . . | 16 F | 47 | 64 | 64 | 128 | 40 | 13 | 20 | 68 | 68 | 136 | 59 | 16 | 20 |
| 77 | Smt. Panchai Dei . . . | 30 F | 47 | 64 | 64 | 128 | 39 | 13 | 20 | 68 | 68 | 136 | 45 | 13 | 15 |
| 78 | Smt. Shriromati Dei . . | 48 F | 44 | 64 | 64 | 128 | 38 | 13 | 20 | 64 | 64 | 128 | 45 | 13 | 15 |
| 79 | Smt. Ananti Raut . . . | 42 F | 47 | 64 | 64 | 128 | 38 | 13 | 20 | 68 | 68 | 136 | 49 | 13 | 15 |
| 80 | Shri Surandra Ram . . . | 28 M | 46 | 64 | 64 | 128 | 38 | 13 | 20 | 68 | 68 | 136 | 49 | 13 | 15 |
| 81 | Shri Kulammi Sahu . . . | 28 M | 45 | 58 | 59 | 116 | 48 | 13 | 20 | 68 | 68 | 136 | 64 | 13 | 20 |
| 82 | Shri Nabikishore Sahu . . | 22 M | 46 | 64 | 54 | 128 | 45 | 12 | 20 | 68 | 68 | 136 | 63 | 13 | 20 |
| 83 | Shri Prahlad Praik . . . | 22 M | 45 | 60 | 60 | 120 | 27 | 13 | 15 | 64 | 64 | 128 | 61 | 14 | 20 |
| 84 | Shri Sumakar Swain . . . | 25 M | 46 | 64 | 64 | 128 | 28 | 13 | 15 | 68 | 68 | 136 | 59 | 14 | 20 |
| 85 | Shri Golak Ch. Sahu . . | 22 M | 45 | 64 | 64 | 128 | 55 | 14 | 30 | 60 | 60 | 120 | 90 | 18 | 20 |
| 86 | Shri Jaledhar Swain . . . | 21 M | 44 | 64 | 64 | 128 | 55 | 14 | 30 | 60 | 60 | 120 | 88 | 16 | 30 |
| 87 | Shri Arakhita Parida . . . | 21 M | 46 | 60 | 60 | 120 | 33 | 14 | 15 | 66 | 66 | 132 | 59 | 15 | 20 |
| 88 | Shri Jandharod Parida . . | 20 M | 41 | 62 | 62 | 124 | 33 | 14 | 15 | 68 | 68 | 136 | 54 | 13 | 20 |
| 89 | Shri Sukh Dev Malik . . | 32 M | 47 | 64 | 64 | 128 | 48 | 19 | 20 | 68 | 68 | 136 | 79 | 20 | 15 |
| 90 | Shri Dhurbe Ch. Biswal . . | 23 M | 47 | 64 | 64 | 128 | 18 | 19 | 20 | 68 | 68 | 136 | 81 | 20 | 25 |
| 91 | Shri Kulamani Das . . . | 32 M | 42 | 64 | 64 | 128 | 60 | 16 | 30 | 50 | 50 | 100 | 43 | 18 | 15 |
| 92 | Shri Nityaranda Pandit . . | 19 M | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 93 | Shri Abhira, Menhantio . . | 22 M | 25 | 32 | 32 | 64 | 13 | 12 | 10 | 68 | 68 | 136 | 36 | 13 | 20 |
| 94 | Shri Prahnlad Malik . . . | 28 M | 47 | 64 | 64 | 128 | 33 | 14 | 15 | 68 | 68 | 136 | 47 | 13 | 25 |
| 95 | Shri Dhrani Malik . . . | 28 M | 46 | 64 | 64 | 128 | 33 | 14 | 15 | 64 | 64 | 128 | 46 | 13 | 15 |
| 96 | Shri B. Mahapatra . . . | 40 M | 47 | 64 | 64 | 128 | 29 | 13 | 13 | 68 | 68 | 136 | 35 | 16 | 15 |
| 97 | Shri Babaji Patra . . . | 30 M | 43 | 64 | 64 | 128 | 23 | 13 | 15 | 52 | 52 | 104 | 28 | 13 | 15 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98 | Shri Anama Sahu | 26 M | 47 | 62 | 62 | 124 | 69 | 15 | 30 | 68 | 68 | 136 | 75 | 15 | 35 |
| 99 | Shri Dalukishore M. | 27 M | 40 | 62 | 62 | 124 | 69 | 15 | 30 | 40 | 40 | 80 | 48 | 15 | 20 |
| 100 | Shri Navakishore Barel | 18 M | 47 | 62 | 62 | 124 | 31 | 12 | 15 | 68 | 68 | 136 | 47 | 13 | 20 |
| 101 | Shri Bisutuma Jena | 18 M | 47 | 64 | 64 | 128 | 51 | 18 | 20 | 68 | 68 | 136 | 72 | 18 | 30 |
| 102 | Shri Khobrabasi Sahu | 36 M | 46 | 64 | 64 | 128 | 51 | 18 | 20 | 68 | 68 | 136 | 74 | 19 | 30 |
| 103 | Shri Lakmidhar Behari | 26 M | 44 | 62 | 62 | 124 | 32 | 13 | 20 | 58 | 59 | 116 | 63 | 11 | 45 |
| 104 | Shri Puran Ch. Pande | 26 M | 46 | 58 | 58 | 116 | 33 | 16 | 15 | 68 | 68 | 136 | 69 | 16 | 30 |
| 105 | Shri Raghunath Singh | 25 M | 47 | 62 | 62 | 124 | 42 | 15 | 20 | 68 | 68 | 136 | 69 | 18 | 30 |
| 106 | Shri Gurcharan Nayak | 23 M | 39 | 60 | 60 | 120 | 31 | 12 | 20 | 40 | 40 | 80 | 14 | 14 | 20 |
| 107 | Shri Pran Nath Kishore | 33 M | 47 | 62 | 62 | 124 | 43 | 16 | 20 | 68 | 68 | 126 | 84 | 14 | 30 |
| 108 | Shri Parkhita Sahu | 26 M | 45 | 62 | 62 | 124 | 43 | 16 | 20 | 56 | 56 | 112 | 76 | 19 | 30 |
| 109 | Shri Raghunath Swain | 23 M | 46 | 62 | 62 | 124 | 30 | 13 | 20 | 62 | 62 | 124 | 40 | 14 | 20 |
| 110 | Shri Bhim Sen Patra | 34 M | 30 | 52 | 52 | 104 | 33 | 16 | 15 | 12 | 12. | 24 | 10 | 13 | 10 |
| 111 | Shri Surjomni Sahu | 21 M | 45 | 60 | 60 | 120 | 30 | 13 | 20 | 68 | 68 | 13 | 40 | 12 | 25 |
| 112 | Shri Rajkshore Jena | 18 M | 45 | 64 | 64 | 128 | 33 | 14 | 20 | 60 | 60 | 120 | 38 | 14 | 20 |
| 113 | Shri Shamsurdar Sahu | 19 M | 45 | 60 | 60 | 120 | 33 | 14 | 20 | 62 | 62 | 124 | 38 | 14 | 20 |
| 114 | Shri Madanmohan Samal | 20 M | 46 | 64 | 64 | 128 | 26 | 13 | 15 | 68 | 48 | 37 | 37 | 13 | 20 |
| 115 | Shri Gurucharan Das | 29 M | 23 | 44 | 44 | 88 | 22 | 13 | 15 | 68 | 68 | 116 | 36 | 12 | 25 |
| 116 | Shri Janoshwar Samal | 27 M | 26 | 24 | 24 | 8 | 25 | 15 | 10 | 28 | 28 | 56 | 54 | 14 | 25 |
| 117 | Shri Pitambar mal | 23 M | 32 | 62 | 62 | 124 | 4 | 4 | 30 | 60 | 60 | 120 | 72 | 15 | 35 |
| 118 | Shri Gopinath Mahantry | 34 M | 7 | 28 | 28 | 56 | 10 | 13 | 10 | .. | .. | .. | .. | .. | .. |
| 119 | Shri Radha Mohan Mahantry | 18 M | 18 | 16 | 16 | 32 | 6 | 14 | 5 | .. | .. | .. | .. | .. | .. |
| 120 | Shri Karunakar Parik | 18 M | 25 | 54 | 54 | 108 | 21 | 13 | 15 | .. | .. | .. | .. | .. | .. |
| 121 | Shri Pardhan | 38 M | 45 | 60 | 60 | 120 | 26 | 13 | 15 | 69 | 68 | 136 | 38 | 13 | 20 |
| 122 | Shri Suchdev Pethal | 28 M | 31 | 58 | 58 | 116 | 33 | 16 | 25 | 8 | 8 | 116 | 5 | 14 | 5 |
| | TOTAL | | | | | | | | | | | 12730 | 5228 | | |

Name of Parishramalaya : Ambar Charkha Parishramalaya
Dighiri, P. O. Tangisahi, Dt. Puri, Orissa.
(Utkal)

Date of Starting 1-2-56.
Number of Charkha Sets : 20.

| Serial No. | Name of Operative | Class of Spinner Age-Sex | No. of days of attendance | From 10th March 56 to 27th March 56 Duration of work (Hours) | | | | | | 28th March 56 to 13th April, 56 Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Carding | Spg. | Total | pro-dn. hanks | Count | Loss (Tolas) | Carding | Spg | Total | Pro-dn. hanks | Count | Loss (Tolas) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Panthra Mandal . . . | 25 M | 68 | 90 | 54 | 144 | 80 | 15 | 28 | 60 | 60 | 120 | 78 | 16 | 28 |
| 2 | Dinabandu samentaray . | 30 M | 66 | 80 | 64 | 144 | 80 | 15 | 42 | 60 | 60 | 120 | 77 | 16 | 40 |
| 3 | Banamali Mohanty . . | 22 M | 67 | 70 | 66 | 136 | 70 | 14 | 100 | 60 | 60 | 120 | 74 | 14 | 105 |
| 4 | Dhurubha Ch. Mohanty . . | 27 M | 50 | 64 | 64 | 128 | 54 | 18 | 18 | 18 | 60 | 120 | 102 | 18 | 30 |
| 5 | Lokaman Khan . . . | 20 M | 61 | 60 | 60 | 120 | 60 | 13 | 40 | 52 | 52 | 104 | 52 | 14 | 40 |
| 6 | Ramjan Khan . . . . | 24 M | 65 | 68 | 68 | 136 | 65 | 16 | 28 | 60 | 60 | 120 | 109 | 15 | 50 |
| 7 | Raghunath Sarangi . . . | 30 M | 71 | 84 | 84 | 178 | 87 | 20 | 30 | 60 | 60 | 120 | 64 | 18 | 36 |
| 8 | Khati Bewa . . . . | 29 M | 69 | 76 | 76 | 152 | 73 | 22 | 29 | 60 | 60 | 120 | 77 | 20 | 20 |
| 9 | Jamberswar Das . . . | 27 M | 61 | 56 | 56 | 112 | 62 | 13 | 40 | 60 | 60 | 120 | 110 | 16 | 35 |
| 10 | Bharat Paikary . . . | 20 M | 66 | 76 | 76 | 152 | 76 | 13 | 40 | 60 | 60 | 120 | 90 | 14 | 50 |
| 11 | Moheswar Singh . . . | 25 M | 65 | 68 | 68 | 136 | 67 | 13 | 30 | 60 | 60 | 120 | 93 | 15 | 60 |
| 12 | Rama Ch. Dalai . . . | 22 M | 68 | 72 | 72 | 144 | 71 | 16 | 60 | 60 | 60 | 120 | 92 | 18 | 83 |
| 13 | Gopinath Ch. Delai . . . | 22 M | 68 | 72 | 72 | 144 | 71 | 16 | 60 | 60 | 60 | 120 | 106 | 16 | 110 |
| 14 | Bharamerbar Sahu . . . | 22 M | 62 | 52 | 52 | 104 | 51 | 13 | 25 | 60 | 60 | 120 | 77 | 14 | 35 |
| 15 | Uhab Khar . . . . | 26 M | 64 | 60 | 60 | 120 | 57 | 18 | 60 | 60 | 60 | 120 | 105 | 15 | 11 |
| 16 | Anath Pradham . . . | 20 M | 58 | 64 | 64 | 128 | 48 | 12 | 48 | 60 | 60 | 120 | 44 | 14 | 44 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Gopinath T. Paikar . . . | 18 M | 63 | 64 | 64 | 128 | 60 | 13 | 80 | 60 | 60 | 120 | 72 | 13 | 83 |
| 18 | Nishakar Mishre . . . | 24 M | 40 | 36 | 36 | 72 | 30 | 13 | 60 | 36 | 36 | 72 | 28 | 16 | 73 |
| 19 | Hariram Jinnah . . . | 27 M | 67 | 76 | 76 | 152 | 77 | 15 | 60 | 60 | 60 | 120 | 85 | 14 | 60 |
| 20 | Rama Dei . . . . | 13 M | 63 | 76 | 76 | 152 | 64 | 18 | 64 | 60 | 60 | 120 | 54 | 12 | 50 |
| 21 | Krishna Ch. Malli . . . | 29 M | 55 | 52 | 52 | 104 | 45 | 13 | 45 | 60 | 60 | 120 | 80 | 18 | 70 |
| 22 | Sachindra Malik . . . | 20 M | 49 | 60 | 60 | 120 | 44 | 14 | 60 | 44 | 44 | 88 | 34 | 13 | 35 |
| 23 | Jambeshwar Pradhan . . . | 21 M | 62 | 72 | 72 | 144 | 74 | 14 | 74 | 60 | 60 | 120 | 70 | 14 | 74 |
| 24 | Narayan Mishra . . . | 28 M | 59 | 64 | 64 | 128 | 54 | 13 | 54 | 60 | 60 | 120 | 51 | 16 | 51 |
| 25 | Yassoda Dei . . . | 14 M | 61 | 76 | 76 | 152 | 64 | 18 | 64 | 60 | 60 | 120 | 49 | 16 | 41 |
| 26 | Indu Dei . . . . . | 13 M | 55 | 72 | 72 | 144 | 57 | 15 | 57 | 48 | 48 | 96 | 37 | 15 | 37 |
| 27 | Aparati Malik . . . | 25 M | 54 | 56 | 56 | 112 | 40 | 14 | 40 | 48 | 48 | 96 | 42 | 16 | 42 |
| 28 | Amaulla Khan . . . | 20 M | 52 | 56 | 66 | 112 | 48 | 11 | 56 | 52 | 52 | 104 | 50 | 16 | 50 |
| 29 | Udayanath Sadepeth . . . | 255 M | 55 | 64 | 64 | 128 | 57 | 18 | 40 | 60 | 60 | 120 | 60 | 18 | 50 |
| 30 | Naik unthanath Mohanthy . . | 27 M | 61 | 64 | 64 | 120 | 67 | 14 | 50 | 60 | 60 | 120 | 96 | 16 | 60 |
| 31 | Maguni Swain . . . | 14 M | 64 | 76 | 76 | 152 | 71 | 13 | 70 | 60 | 60 | 120 | 95 | 150 | 95 |
| 32 | Paghunath Swain . . . | 20 M | 47 | 64 | 64 | 128 | 57 | 14 | 50 | 20 | 28 | 65 | 53 | 14 | 20 |
| 33 | Achhay Bewa . . . | 28 M | 62 | 68 | 68 | 136 | 59 | 6 | 60 | 60 | 60 | 120 | 40 | 16 | 40 |
| 34 | Sappi Dei . . . | 17 M | 62 | 68 | 68 | 136 | 59 | 14 | 60 | 60 | 60 | 120 | 40 | 16 | 30 |
| 35 | Jahna Dei . . . | 15 M' | 51 | 74 | 70 | 144 | 57 | 15 | 57 | 48 | 48 | 96 | 37 | 15 | 37 |
| 36 | Kunthla Dei . . . . | 14 M | 52 | 72 | 72 | 144 | 60 | 15 | 60 | 40 | 40 | 80 | 29 | 15 | 39 |
| 37 | Kikamber Adhikaril . . . | 19 M | 56 | 76 | 76 | 152 | 69 | 13 | 60 | 60 | 60 | 120 | 50 | 14 | 50 |
| 38 | Hangopinda Nayak . . . | 22 M | 51 | 52 | 52 | 104 | 39 | 13 | 48 | 60 | 60 | 120 | 31 | 31 | 47 |
| 39 | Rajkishore Nayak . . . | 23 M | 48 | 52 | 52 | 104 | 43 | 15 | 62 | 48 | 48 | 96 | 37 | 14 | 40 |
| 40 | Budhu Dei . . . | 28 M | 58 | 76 | 76 | 152 | 60 | 16 | 30 | 60 | 60 | 120 | 42 | 16 | 40 |
| 41 | Duryodan Sahu . . . | 22 M | 46 | 68 | 68 | 136 | 52 | 12 | 60 | 60 | 60 | 120 | 52 | 13 | 50 |
| 42 | Sekh Raffudin . . . . | 25 M | 47 | 72 | 72 | 144 | 56 | 11 | 25 | 60 | 60 | 120 | 57 | 12 | 60 |
| 43 | Sansari Sahu . . . . | 20 M | 380 | 48 | 48 | 96 | 37 | 12 | 60 | 56 | 56 | 112 | 43 | 14 | 40 |
| 44 | Navakishore Pradhan . . . | 20 M | 43 | 72 | 72 | 144 | 54 | 14 | 50 | 51 | 52 | 104 | 51 | 14 | 50 |
| 45 | Hathu Bandhu Ditta . . . | 22 M | 43 | 72 | 72 | 144 | 54 | 15 | 40 | 52 | 52 | 104 | 51 | 14 | 50 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | Jogendra Mahanty . . . | 25 M | 24 | 68 | 68 | 136 | 46 | 13 | 46 | 60 | 60 | 120 | 72 | 13 | 72 |
| 47 | Neelamani Nanda . . . | 20 M | 33 | 52 | 52 | 104 | 34 | 12 | 34 | 40 | 40 | 80 | 20 | 20 | 26 |
| 48 | Panchu Nayak . . . . | 28 M | 38 | 52 | 52 | 104 | 34 | 12 | 40 | 60 | 60 | 120 | 52 | 12 | 72 |
| 49 | Rajkishore Nishanka . . . | 22 M | 35 | 52 | 52 | 104 | 35 | 13 | 30 | 60 | 60 | 120 | 52 | 14 | 31 |
| 50 | Mathusudan Mahapatra . . | 19 M | 33 | 52 | 52 | 104 | 25 | 15 | 30 | 52 | 52 | 104 | 31 | 15 | 30 |
| 51 | Panchanan Biswal . . | 19 M | 32 | 52 | 52 | 104 | 23 | 12 | 15 | 60 | 60 | 120 | 36 | 14 | 36 |
| 52 | Narayan Sahu . . . | 25 M | 34 | 64 | 64 | 128 | 24 | 13 | 35 | 60 | 60 | 120 | 49 | 14 | 50 |
| 53 | Dukhyshyam Das . . . | 22 M | 35 | 68 | 68 | 136 | 38 | 13 | 40 | 60 | 60 | 120 | 65 | 12 | 60 |
| 54 | Chaturbhuja Nethi . . . | 22 M | 35 | 60 | 60 | 120 | 33 | 11 | 33 | 60 | 60 | 120 | 44 | 12 | 44 |
| 55 | Brahmanand Swain . . . | 21 M | 35 | 68 | 68 | 136 | 35 | 11 | 34 | 60 | 60 | 120 | 51 | 11 | 50 |
| 56 | Bharat Mansingh . . . | 20 M | 38 | 72 | 72 | 144 | 44 | 12 | 44 | 52 | 52 | 104 | 40 | 40 | 40 |
| 57 | Jagmohan Panda . . . | 19 M | 38 | 68 | 68 | 136 | 32 | 13 | 32 | 60 | 120 | 30 | | | |
| 58 | Poorna Ch. Malik . . . | 22 M | 23 | 64 | 64 | 128 | 33 | 13 | 35 | 28 | 28 | 56 | 21 | 16 | 20 |
| 59 | Sanathana Mohanthy . . . | 25 M | 26 | 44 | 44 | 88 | 20 | 11 | 20 | 60 | 60 | 120 | 43 | 11 | 45 |
| 60 | Poorna Ch. Sahu . . . | 25 M | 25 | 40 | 40 | 80 | 20 | 12 | 20 | 60 | 60 | 120 | 46 | 12 | 50 |
| | TOTAL | | | | | | | | | | | 6712 | 3488 | | |

Name of Parishramalaya: Orissa (State)

Date of starting 29-1-56

Number of Charkha Sets 18

| S. No. | Name of Operative | Class of Spinner Age Sex | No. of days of attendance | From the 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spin-ning | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Shri Ramachandra Sahu . . | 26 M | 61 | 52 | 52 | 104 | 54 | 17 | 58 | 56 | 56 | 112 | 104 | 19 | 43 |
| 2 | Shri Daitari Sahu . . . | 20 M | 67 | 60 | 60 | 120 | 54 | 19 | 57 | 56 | 56 | 112 | 60 | 17 | 35 |
| 3 | Shri Hadibandhu Nayak . . | 22 M | 67 | 60 | 60 | 120 | 45 | 14 | 62 | 56 | 56 | 112 | 67 | 18 | 30 |
| 4 | Shri Abhiram Nayak . . . | 18 M | 62½ | 50 | 50 | 100 | 44 | 18 | 54 | 52 | 52 | 104 | 62 | 19 | 24 |
| 5 | Shri Jaladhar Nayak . . . | 25 M | 66 | 60 | 60 | 120 | 70 | 17 | 71 | 56 | 56 | 112 | 112 | 18 | 50 |
| 6 | Shri Shyamsundar Ghadai . . | 35 M | 60½ | 46 | 46 | 92 | 49 | 14 | 58 | 52 | 52 | 104 | 88 | 16 | 43 |
| 7 | Shri Khetramdhan Sethi . . | 22 M | 67 | 60 | 60 | 120 | 88 | 15 | 76 | 56 | 56 | 112 | 112 | 16 | 47 |
| 8 | Shri Chinthamani Sia . . | 23 M | 65 | 52 | 52 | 104 | 45 | 14 | 57 | 56 | 56 | 112 | 64 | 18 | 30 |
| 9 | Shri Sachidananda Hati . . | 21 M | 62½ | 42 | 42 | 84 | 44 | 14 | 58 | 56 | 56 | 112 | 83 | 17 | 44 |
| 10 | Shri Purna Chandra Panda . . | 30 M | 65½ | 58 | 58 | 116 | 60 | 21 | 55 | 56 | 56 | 112 | 76 | 20 | 37 |
| 11 | Shri Bhagaban Chandra Sukla . | 26 M | 66 | 58 | 58 | 116 | 78 | 20 | 63 | 56 | 56 | 112 | 90 | 20 | 37 |
| 12 | Shri Baikunthanath Misro . | 26 M | 56 | 39 | 30 | 60 | 22 | 18 | 16 | 46 | 46 | 92 | 27 | 20 | 11 |
| 13 | Shri Narandra Padhi . . . | 33 M | 66 | 58 | 58 | 116 | 67 | 19 | 40 | 56 | 56 | 112 | 96 | 20 | 48 |
| 14 | Shri Ohorishau . . . | 28 M | 65 | 52 | 52 | 104 | 65 | 19 | 29 | 56 | 56 | 112 | 89 | 18 | 48 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Shri Chindamani Biswal . . | 23 M | 67 | 60 | 60 | 120 | 87 | 15 | 54 | 56 | 56 | 112 | 112 | 16 | 51 |
| 16 | Shri Sawarasan Panda . . | 29 M | 64 | 60 | 60 | 120 | 62 | 15 | 31 | 50 | 50 | 100 | 96 | 18 | 55 |
| 17 | Shri Braundaban Gandhi . . | 38 M | 67 | 60 | 60 | 120 | 68 | 17 | 43 | 56 | 56 | 112 | 99 | 16 | 50 |
| 18 | Shri Bhababinoda Samal . . | 27 M | 63 | 60 | 60 | 120 | 62 | 15 | 43 | 56 | 56 | 112 | 70 | 17 | 32 |
| 19 | Shri Baidhal Samal . . . | 42 M | 42 | 32 | 32 | 64 | 33 | 13 | 22 | .. | .. | .. | .. | .. | .. |
| 20 | Shri Hari Samal . . . | 40 M | 47 | 40 | 40 | 80 | 20 | 13 | 19 | .. | .. | .. | .. | .. | .. |
| 21 | Shri Badmalochana Jeua . . | 35 M | 67 | 60 | 60 | 120 | 91 | 16 | 53 | 56 | 56 | 112 | 112 | 19 | 53 |
| 22 | Shri Mangalchand Das . . | 20 M | 46 | 56 | 56 | 112 | 39 | 16 | 32 | .. | .. | .. | .. | .. | .. |
| 23 | Shri Baishanbe Ch· Das . . | 42 M | 41 | 12 | 12 | 24 | 10 | 16 | 15 | .. | .. | .. | .. | .. | .. |
| 24 | Shri Bhaskar Das . . . | 22 M | 62 | 60 | 60 | 120 | 42 | 16 | 26 | 44 | 44 | 88 | 47 | 16 | 27 |
| 25 | Shri Govinda Das . . . | 20 M | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 26 | Shri Ramchandaran Ghadai . | 30 M | 65 | 60 | 60 | 120 | 49 | 27 | 27 | 48 | 58 | 96 | 59 | 16 | 30 |
| 27 | Smt. Satyabhana Ghadai . . | 50 F | 66 | 56 | 56 | 112 | 44 | 18 | 28 | 56 | 56 | 112 | 49 | 18 | 28 |
| 28 | Shri Anandi Chand Das . . | 28 M | 62 | 50 | 50 | 100 | 45 | 18 | 24 | 48 | 48 | 96 | 60 | 10 | 27 |
| 29 | Shri Bansidhar Nayar . . | 30 M | 27 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 30 | Shri Mahindar Saurehua . . | 24 M | 64 | 56 | 56 | 112 | 52 | 16 | 26 | 56 | 56 | 112 | 76 | 17 | 37 |
| 31 | Shri Krishna Chandra Das . . | 24 M | 64 | 52 | 52 | 104 | 47 | 20 | 16 | 56 | 56 | 112 | 56 | 19 | 24 |
| 32 | Shri Govinda Chand Nayar . | 24 M | 64 | 60 | 60 | 120 | 56 | 16 | 28 | 52 | 52 | 104 | 52 | 18 | 25 |
| 33 | Shri Laxmi Dhar Samal . . | 26 M | 58 | 60 | 60 | 120 | 47 | 15 | 30 | 22 | 22 | 44 | 13 | 16 | 9 |
| 34 | Smt. Bhagirathi Root . . . | 21 F | 66 | 60 | 60 | 120 | 89 | 19 | 29 | 56 | 56 | 112 | 151 | 22 | 58 |
| 35 | Shri Bansidhar Ghadai . . | 42 M | 59 | 60 | 60 | 120 | 4 | 13 | 1 | 36 | 36 | 72 | 9 | 19 | 9 |
| 36 | Shri Raghunath Rout . . | 43 M | 67 | 60 | 60 | 120 | 14 | 14 | 6 | 56 | 56 | 112 | 15 | 14 | 10 |
| 37 | Shri Chhaka Das . . | 40 M | 47 | 40 | 40 | 80 | 19 | 14 | 6 | .. | .. | .. | .. | .. | .. |
| 38 | Shri Krishna Chandar Pande . | 45 M | 24 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 39 | Shri Madhura Mohal Das . . | 48 M | 59 | 52 | 52 | 104 | 23 | 14 | 7 | 48 | 48 | 96 | 17 | 13 | 10 |
| 40 | Shri Surendra Pr. Mohantry . | 27 M | 59 | 60 | 60 | 120 | 62 | 17 | 26 | 56 | 56 | 112 | 65 | 18 | 27 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | Shri Laxman Sahu . . . | 24 M | 39 | 60 | 60 | 120 | 60 | 15 | 36 | 56 | 56 | 112 | 96 | 17 | 44 |
| 42 | Shri Golau Nayak . . . | 24 M | 40 | 56 | 56 | 112 | 45 | 17 | 25 | 56 | 56 | 112 | 56 | 18 | 25 |
| 43 | Shri Bhikari Charan Das . | 22 M | 41 | 60 | 60 | 120 | 34 | 16 | 22 | 56 | 56 | 112 | 54 | 17 | 24 |
| 44 | Shri Gayadhar Icnka . . | 21 M | 41 | 60 | 60 | 120 | 33 | 16 | 21 | 56 | 56 | 112 | 54 | 17 | 25 |
| 45 | Shri Khetraonau Khataua . . | 25 M | 25 | 36 | 36 | 72 | 14 | 16 | 14 | 56 | 56 | 112 | 50 | 17 | 27 |
| 46 | Shri Maheshwar Pande . . | 31 M | 36 | 52 | 52 | 104 | 28 | 17 | 19 | 44 | 44 | 88 | 23 | 17 | 30 |
| 47 | Shri Jai Krishan Tripathi . . | 21 M | 38 | 60 | 60 | 120 | 29 | 14 | 21 | 44 | 44 | 88 | 31 | 16 | 18 |
| 48 | Shri Narhari Pande . . . | 18 M | 40 | 60 | 60 | 120 | 25 | 13 | 20 | 52 | 52 | 104 | 29 | 16 | 18 |
| 49 | Shri Brundaban Pande . . | 21 M | 35 | 52 | 52 | 104 | 13 | 13 | 16 | 40 | 40 | 80 | 13 | 12 | 11 |
| 50 | Shri Musa Das . . . | 30 M | 39 | 60 | 60 | 120 | 47 | 12 | 21 | 48 | 48 | 96 | 52 | 12 | 38 |
| 51 | Shri Arjun Ch. Das . . . | 29 M | 41 | 60 | 60 | 120 | 37 | 13 | 25 | 56 | 56 | 112 | 49 | 14 | 31 |
| 52 | Shri Ramchandar Rout . . | 23 M | 41 | 58 | 58 | 116 | 29 | 15 | 20 | 56 | 56 | 112 | 32 | 14 | 18 |
| 53 | Shri Bhagwat Pr. Barik . . | 20 M | 41 | 60 | 60 | 120 | 28 | 15 | 11 | 56 | 56 | 112 | 60 | 20 | 28 |
| 54 | Shri Laxmidhar Maghi . . | 20 M | 58 | 60 | 60 | 120 | 41 | 14 | 26 | 48 | 48 | 96 | 39 | 18 | 25 |
| 55 | Shri Surendar Das . . . | 23 M | 41 | 60 | 60 | 120 | 43 | 13 | 32 | 56 | 56 | 112 | 46 | 16 | 38 |
| 56 | Shri Daitari Katua . . . | 26 M | 25 | 52 | 52 | 104 | 24 | 13 | 20 | .. | .. | .. | .. | .. | .. |
| 57 | Shri Varahmaunda Pande . . | 22 M | 38 | 52 | 52 | 104 | 31 | 15 | 22 | 52 | 52 | 14 | 40 | 17 | 26 |
| 58 | Shri Nurshingh Ch. Behra . . | 19 M | 33 | 32 | 32 | 64 | 13 | 13 | 6 | 52 | 52 | 104 | 34 | 14 | 20 |
| 59 | Shri Bayanaku Vegera . . | 25 M | 12 | 4 | 4 | 8 | 1 | 10 | 11 | .. | .. | .. | .. | .. | .. |
| 60 | Shri Maniphadra Mohantry . | 28 M | 40 | 56 | 56 | 112 | 41 | 19 | 23 | 56 | 56 | 112 | 84 | 20 | 27 |
| 61 | Smt. Uma Devi . . . . | 42 F | 39 | 50 | 60 | 120 | 26 | 13 | 21 | 56 | 56 | 112 | 30 | 14 | 30 |
| 62 | Smt. Nayana Dei . . . | 27 F | 39 | 60 | 60 | 120 | 41 | 12 | 25 | 56 | 56 | 112 | 74 | 13 | 43 |
| 63 | Smt. Hara Dei . . . . | 40 F | 39 | 60 | 60 | 120 | 35 | 16 | 23 | 56 | 56 | 112 | 39 | 14 | 26 |
| 64 | Smt. Kant Nayak . . . | 15 F | 30 | 60 | 60 | 120 | 47 | 14 | 27 | 56 | 56 | 112 | 48 | 16 | 22 |
| 65 | Smt. Chemi Nayak . . . | 41 F | 22 | 44 | 44 | 88 | 14 | 16 | 16 | 44 | 44 | 88 | 16 | 13 | 33 |
| 66 | Smt. Ananta Mohantry . . | 22 F | 22 | 40 | 40 | 80 | 14 | 16 | 17 | 48 | 48 | 96 | 28 | 15 | 24 |
| 67 | Shri Govind Chadr Kar . . | 27 M | 19 | 20 | 20 | 40 | 4 | 15 | 13 | 56 | 56 | 112 | 56 | 19 | 28 |
| | TOTAL | | | | | | | | | | | 5950 | 3427 | | |

Name of Parishramalaya : **BEGUNAYA PADAP**

ORISSA (Utkal). Number of Charkha Sets 45

| S. No | Name of Operative | Class of spinner. Age Sex. | No. of days of attendance | From 10th March, 56 to 27th March, 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March, 56 to 13th April, 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Padamabhave Misro | 25 M | 59 | 60 | 60 | 120 | 58 | 14 | 25 | 60 | 60 | 120 | 47 | 16 | 20 |
| 2 | Vaidyanath Panigharee | 28 M | 53 | 60 | 60 | 120 | 57 | 16 | 45 | 56 | 56 | 112 | 47 | 14 | 35 |
| 3 | Banchhamdhi Mahanty | 20 M | 55 | 60 | 60 | 120 | 51 | 12 | 38 | 44 | 44 | 88 | 37 | 13 | 27 |
| 4 | Shittaranjan Pradhan | 20 M | 37 | 32 | 32 | 64 | 29 | 14 | 22 | 40 | 40 | 80 | 32 | 15 | 34 |
| 5 | K. Rajandar Prasad Patno | 30 M | 53 | 60 | 60 | 120 | 55 | 17 | 40 | 56 | 56 | 112 | 49 | 14 | 36 |
| 6 | Raghunath Pattnagar | 30 M | 55 | 60 | 60 | 120 | 50 | 16 | 36 | 52 | 52 | 104 | 50 | 16 | 36 |
| 7 | Ananto Patno | 22 M | 38 | 48 | 48 | 96 | 36 | 14 | 27 | 40 | 40 | 80 | 30 | 14 | 22 |
| 8 | Raghuba Pattnayak | 30 M | 56 | 60 | 60 | 120 | 64 | 14 | 48 | 48 | 48 | 96 | 53 | 14 | 40 |
| 9 | Appana Ganpayat | 20 M | 30 | 28 | 28 | 56 | 21 | 14 | 16 | 40 | 40 | 80 | 13 | 13 | 10 |
| 10 | Biprabandhu Behara | 28 M | 50 | 60 | 60 | 120 | 52 | 16 | 40 | 48 | 48 | 96 | 44 | 17 | 30 |
| 11 | Lakhane Mahanty | 22 M | 48 | 48 | 48 | 96 | 40 | 17 | 30 | 52 | 52 | 104 | 36 | 17 | 24 |
| 12 | Raghunath Patno | 22 M | 55 | 52 | 52 | 104 | 45 | 15 | 24 | 68 | 68 | 136 | 60 | 19 | 40 |
| 13 | Bhanhagrahi Sakon | 22 M | 51 | 48 | 48 | 96 | 41 | 16 | 30 | 60 | 60 | 120 | 53 | 14 | 40 |
| 14 | Judhistar Swamy | 22 M | 51 | 32 | 32 | 64 | 29 | 13 | 20 | 64 | 64 | 128 | 64 | 13 | 50 |
| 15 | Akual Gonde | 20 M | 49 | 44 | 44 | 88 | 34 | 16 | 25 | 60 | 63 | 120 | 41 | 16 | 30 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Brindaban Panda | 20 M | 35 | 24 | 24 | 48 | 16 | 15 | 10 | 28 | 28 | 56 | 25 | 13 | 20 |
| 17 | Kritan Swin | 25 M | 53 | 48 | 48 | 96 | 41 | 13 | 30 | 52 | 52 | 104 | 50 | 15 | 40 |
| 18 | Barchhanadhi Tripathi | 25 M | 52 | 44 | 44 | 88 | 39 | 15 | 30 | 56 | 56 | 112 | 54 | 16 | 40 |
| 19 | Kanaraja Patno | 20 M | 58 | 52 | 52 | 104 | 60 | 20 | 45 | 72 | 72 | 144 | 68 | 17 | 40 |
| 20 | Goutohari Sahon | 22 M | 54 | 60 | 60 | 120 | 52 | 14 | 40 | 64 | 64 | 128 | 56 | 13 | 46 |
| 21 | Abhumanu Sahon | 20 M | 35 | 60 | 60 | 120 | 41 | 15 | 30 | 64 | 64 | 128 | 50 | 17 | 40 |
| 22 | Dandipani Sahon * | 20 M | 56 | | | | | | | | | | | | |
| 23 | Ramah Chandar Misro | 22 M | 34 | 60 | 60 | 120 | 48 | 15 | 36 | 64 | 64 | 128 | 55 | .. | .. |
| 24 | Hira Devi. | 30 F | 24 | 36 | 60 | 72 | 34 | 13 | 25 | 32 | 32 | 64 | 77 | | .. |
| 25 | Dhobay Devi | 28 F | 42 | 32 | 32 | 64 | 31 | 13 | 15 | 32 | 32 | 64 | 18 | .. | .. |
| 26 | Labanyubati Devi | 25 F | 39 | 40 | 40 | 80 | 37 | 16 | 30 | 40 | 40 | 80 | .. | .. | .. |
| 27 | Savatri Devi | .. | .. | | | | | | | | | | | | |
| 28 | Sakuntala Devi | | | | | | | | | | | | | | |
| 29 | Chhan Nayak | | | | | | | | | | | | | | |
| 30 | Bhismadeva Panda | | | | | | | | | | | | | | |
| 31 | Sanyasi Reddy | 30 M | 37 | 44 | 44 | 88 | 31 | 18 | 20 | .. | .. | .. | .. | .. | .. |
| 32 | Sabti Pallai | 22 M | 15 | 24 | 24 | 48 | 16 | 15 | 14 | .. | .. | .. | .. | .. | .. |
| 33 | K. Bhimaya Patno | 35 M | 27 | 36 | 36 | 72 | 28 | 13 | 20 | 36 | 36 | 72 | 28 | 19 | 20 |
| 34 | Malo Patno | 22 M | 36 | 36 | 36 | 72 | 28 | 13 | 20 | 52 | 52 | 104 | 40 | 18 | 30 |
| 35 | Bhimasano Pradhan | 30 M | 36 | 52 | 52 | 104 | 48 | 13 | 35 | 56 | 56 | 112 | 50 | 14 | 40 |
| 36 | Dandapani Pradhan | 22 M | 36 | 44 | 44 | 88 | 39 | 19 | 30 | 36 | 36 | 72 | 33 | 19 | 20 |
| 37 | Bhobani Jana | 25 M | 36 | 38 | 48 | 96 | 38 | 17 | 25 | 30 | 40 | 80 | 31 | 18 | 20 |
| 38 | Khali Sahon | 25 M | 43 | 60 | 60 | 120 | 49 | 16 | 40 | 52 | 52 | 104 | 48 | 18 | 35 |
| 39 | Ajaram Patna | 20 M | 33 | 40 | 40 | 80 | 30 | 15 | 20 | 36 | 36 | 72 | 27 | 12 | 20 |
| 40 | Mihinacharan J. Nayak | 30 M | 36 | 40 | 40 | 80 | 28 | 12 | 20 | 68 | 68 | 136 | 44 | 11 | 30 |
| 41 | Sadashiva Patno | 25 M | 28 | 40 | 40 | 80 | 32 | 12 | 25 | 36 | 36 | 72 | 27 | 15 | 20 |
| 42 | Jityanando Patno | 25 M | 27 | 40 | 40 | 80 | 89 | 12 | 20 | 32 | 32 | 64 | 27 | 15 | 20 |
| 43 | Gadadhano Behara | 30 M | 38 | 60 | 60 | 120 | 56 | 15 | 40 | 56 | 56 | 112 | 51 | 14 | 35 |
| 44 | Syamo Sundar Patno | 20 M | 38 | 60 | 60 | 120 | 46 | 15 • | 30 | 56 | 56 | 112 | 48 | 14 | 35 |
| 45 | Brundaban Patna (A). | 25 M | 40 | 60 | 60 | 120 | 43 | 14 | 25 | 64 | 64 | 128 | 50 | 14 | 35 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | Badhi Behra . . . | 25 M | 41 | 60 | 60 | 120 | 52 | 13 | 35 | 68 | 68 | 136 | 60 | 15 | 45 |
| 47 | Raghunath Sahow . . . | 25 M | 29 | 48 | 48 | 96 | 23 | 12 | 15 | 40 | 49 | 80 | 29 | 12 | 20 |
| 48 | Brundaban Patna (B) . . | 25 M | 26 | 40 | 40 | 80 | 25 | 13 | 20 | 32 | 52 | 64 | 24 | 13 | 15 |
| 49 | Bh. Vankat Ratna . . . | 30 M | 18 | 28 | 28 | 56 | 12 | 13 | 10 | 24 | 24 | 48 | 22 | 14 | 15 |
| 50 | Govind Ch. Pati . . . | 30 M | 35 | 60 | 60 | 120 | 33 | 15 | 25 | 60 | 60 | 120 | 44 | 16 | 30 |
| 51 | Mratemjaya Satpata . . . | 20 M | 24 | 48 | 48 | 96 | 14 | 13 | 10 | 44 | 44 | 88 | 23 | 12 | 15 |
| 52 | Kasinath Dakna . . . | 25 M | 32 | 56 | 56 | 112 | 37 | 13 | 30 | 60 | 60 | 120 | 48 | 13 | 35 |
| 53 | Jaganath Patno . . . | 25 M | 34 | 56 | 56 | 112 | 31 | 13 | 20 | 64 | 64 | 128 | 47 | 13 | 35 |
| 54 | Trilochand Doe . . . | 22 M | 27 | 44 | 44 | 88 | 24 | 12 | 15 | 48 | 48 | 96 | 33 | 18 | 25 |
| 55 | Ramchandar Behara . . . | 25 M | 7 | 12 | 12 | 24 | 3 | 16 | 5 | 16 | 16 | 32 | 21 | 13 | 15 |
| 56 | Udayanath Hoth . . . | 30 M | 26 | 40 | 40 | 80 | 18 | 13 | 15 | 64 | 64 | 128 | 58 | 14 | 40 |
| 57 | Dandapani Panda . . . | 35 M | 23 | 44 | 44 | 88 | 14 | 12 | 14 | 48 | 48 | 96 | 28 | 14 | 20 |
| 58 | A. Amai Bewa . . . | 23 M | 71 | 80 | 80 | 160 | 103 | 18 | 40 | 68 | 68 | 136 | 116 | 20 | 40 |
| 59 | Puni Bewa . . . | 20 M | 71 | 80 | 80 | 160 | 93 | 18 | 66 | 68 | 68 | 136 | 77 | 20 | 60 |
| 60 | Guruhari Beharani . . . | 23 M | 70 | 78 | 78 | 156 | 59 | 12 | 30 | 64 | 64 | 128 | 64 | 14 | 24 |
| 61 | Subhadra Devi . . . | 19 F | 69 | 80 | 80 | 160 | 58 | 14 | 40 | 68 | 68 | 136 | 56 | 14 | 47 |
| 62 | Malti Devi (A) . . . | 18 F | 71 | 80 | 80 | 160 | 48 | 13 | 30 | 68 | 68 | 156 | 56 | 14 | 23 |
| 63 | Malati Devi (B) . . . | 22 F | 71 | 80 | 80 | 170 | 75 | 13 | 40 | 68 | 68 | 136 | 67 | 15 | 40 |
| 64 | Subarna Devi . . . | 19 F | 70 | 76 | 76 | 152 | 69 | 15 | 40 | 58 | 68 | 136 | 75 | 19 | 26 |
| 65 | Dhukhi Devi . . . | 18 F | 71 | 80 | 80 | 160 | 65 | 14 | 20 | 68 | 68 | 136 | 75 | 18 | 17 |
| 66 | Padma Bewa . . . | 22 F | 70 | 80 | 80 | 160 | 52 | 13 | 10 | 64 | 64 | 123 | 51 | 16 | 10 |
| 67 | Satyabhama Bewa . . . | 27 F | 71 | 80 | 80 | 160 | 52 | 12 | 15 | 68 | 68 | 136 | 49 | 14 | 13 |
| 68 | Barjabandhu Besai . . . | 30 M | 57 | 34 | 34 | 68 | 18 | 13 | 13 | 56 | 56 | 112 | 34 | 16 | 10 |
| 69 | Udyanath Panigrahi . . | 26 M | 67 | 70 | 70 | 140 | 45 | 14 | 40 | 62 | 62 | 124 | 51 | 18 | 21 |
| 70 | Satrughan Nayak . . . | 22 M | 68 | 72 | 72 | 144 | 56 | 11 | 13 | 64 | 64 | 128 | 55 | 13 | 30 |
| 71 | Brinadaban Nayak . . . | 25 M | 67 | 68 | 68 | 136 | 37 | 12 | 13 | 64 | 64 | 128 | 45 | 13 | 30 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | Kripasindhu Panigrahi | 26 M | 67 | 72 | 72 | 144 | 40 | 10 | 25 | 60 | 60 | 120 | 35 | 12 | 22 |
| 73 | Laxman Nair | 28 M | 63 | 74 | 74 | 148 | 43 | 12 | 24 | 40 | 40 | 80 | 30 | 14 | 20 |
| 74 | Bauri Dakna | 20 M | 64 | 76 | 76 | 152 | 42 | 10 | 24 | 46 | 46 | 92 | 29 | 12 | 20 |
| 75 | Raghu Dakna | 19 M | 54 | 60 | 60 | 120 | 35 | 12 | 22 | 20 | 20 | 40 | 8 | 30 | 5 |
| 76 | Sashibhusan Vesoi | 25 M | 63 | 70 | 70 | 140 | 33 | 11 | 22 | 60 | 60 | 120 | 30 | 15 | 20 |
| 77 | Adkanda Basai | 23 M | 70 | 78 | 78 | 156 | 38 | 13 | 35 | 66 | 66 | 132 | 34 | 15 | 22 |
| 78 | Udyanath Beharai | 22 M | 70 | 78 | 78 | 156 | 73 | 15 | 45 | 64 | 64 | 128 | 78 | 12 | 50 |
| 79 | K. Balram Patra | 24 M | 41 | 54 | 54 | 108 | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 79A | Balakrish Panigradi | 22 M | 66 | 76 | 76 | 152 | 75 | 12 | 45 | 52 | 52 | 104 | 66 | 18 | 14 |
| 80 | K. Balram Paigra | 24 M | 41 | 54 | 54 | 108 | 14 | 12 | 10 | .. | .. | .. | .. | .. | .. |
| 81 | Ghana Behra | 30 M | 65 | 76 | 76 | 152 | 28 | 14 | 18 | 48 | 48 | 96 | 31 | 12 | 20 |
| 82 | Bhima Nayak | 21 M | 65 | 76 | 76 | 158 | 34 | 15 | 32 | 46 | 46 | 92 | 29 | 14 | 20 |
| 83 | Raghunath Swin | 26 M | 64 | 76 | 76 | 162 | 63 | 15 | 40 | 44 | 44 | 88 | 29 | 16 | 20 |
| 84 | Siva Dakna | 29 M | 70 | 80 | 80 | 160 | 65 | 15 | 40 | 64 | 64 | 128 | 55 | 16 | 35 |
| 85 | Khali Maharama | 25 M | 68 | 74 | 74 | 148 | 64 | 14 | 40 | 64 | 64 | 128 | 65 | 13 | 40 |
| 86 | Magaya Sahoo | 32 M | 66 | 70 | 70 | 140 | 56 | 14 | 35 | 56 | 56 | 112 | 44 | 11 | 35 |
| 87 | Solia Nayak | 27 M | 61 | 46 | 46 | 92 | 32 | 15 | 20 | 64 | 64 | 120 | 45 | 13 | 35 |
| 88 | Shri Hakash Nayak | 28 M | 70 | 76 | 76 | 152 | 80 | 12 | 50 | 68 | 68 | 136 | 77 | 15 | 48 |
| 89 | Satyawadi Acharya | 31 M | 68 | 72 | 72 | 144 | 79 | 13 | 50 | 68 | 68 | 136 | 80 | 14 | 50 |
| 90 | Ganesh Reth (A) | 32 M | 57 | 80 | 80 | 160 | 47 | 11 | 30 | 64 | 64 | 128 | 48 | 14 | 30 |
| 91 | Ganesh Reth (B) | 26 M | 59 | 80 | 80 | 160 | 51 | 30 | 68 | 68 | 68 | 136 | 52 | 17 | 30 |
| 92 | Digambar Reth | 25 M | 57 | 76 | 76 | 152 | 64 | 12 | 40 | 64 | 64 | 128 | 61 | 16 | 35 |
| 93 | Kishore Chandra Reth | 27 M | 59 | 80 | 80 | 160 | 40 | 15 | 20 | 68 | 68 | 136 | 61 | 17 | 35 |
| 94 | Krishna Ch. Panda | 27 M | 52 | 70 | 70 | 140 | 25 | 17 | 15 | 60 | 60 | 120 | 38 | 15 | 25 |
| 95 | Binayak Mishra | 20 M | 59 | 80 | 80 | 160 | 26 | 16 | 15 | 68 | 68 | 136 | 40 | 13 | 25 |
| 96 | Tateswar Rath | 28 M | 54 | 72 | 72 | 144 | 47 | 13 | 30 | 56 | 56 | 112 | 50 | 15 | 30 |
| 97 | Purna C Acharya | 23 M | 58 | 76 | 76 | 152 | 47 | 15 | 30 | 68 | 68 | 130 | 58 | 16 | 30 |
| 98 | Devaraja Rath | 34 M | 58 | 74 | 74 | 148 | 18 | 17 | 32 | 68 | 68 | 136 | 41 | 16 | 25 |
| 99 | Denidar Reth | 26 M | 56 | 74 | 74 | 148 | 45 | 14 | 30 | 60 | 60 | 120 | 48 | 18 | 30 |
| 100 | Sarat Ch. Rath | 25 M | 45 | 52 | 52 | 104 | 21 | 15 | 14 | 68 | 68 | 136 | 67 | 15 | 24 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 | Ramesh Ch. Pattanak . . | 23 M | 55 | 68 | 68 | 136 | 28 | 13 | 25 | 68 | 68 | 136 | 41 | 17 | 25 |
| 102 | Sadasiva Satpatty . . . | 26 M | 46 | 56 | 56 | 112 | 30 | 20 | 25 | 44 | 44 | 88 | 44 | 21 | 25 |
| 103 | Balkrishana Satpatty . . . | 24 M | 54 | 76 | 76 | 152 | 50 | 19 | 30 | 54 | 54 | 108 | 51 | 15 | 30 |
| 104 | Manguli Satapatty . . . | 23 M | 47 | 54 | 54 | 108 | 17 | 12 | 12 | 44 | 44 | 88 | 24 | 16 | 15 |
| 105 | Bainidhar Satpatty . . . | 26 M | 47 | 62 | 62 | 124 | 20 | 13 | 15 | 44 | 44 | 88 | 23 | 14 | 15 |
| 106 | Somnath Shoo . . . | 29 M | 55 | 68 | 68 | 136 | 53 | 16 | 30 | 58 | 58 | 116 | 50 | 17 | 30 |
| 107 | Jagannath Bisoi . . . | 27 M | 52 | 76 | 76 | 152 | 52 | 18 | 40 | 62 | 62 | 124 | 53 | 19 | 30 |
| 108 | Purna Ch. Nayak . . . | 22 M | 56 | 74 | 74 | 148 | 41 | 12 | 25 | 60 | 60 | 120 | 54 | 17 | 35 |
| 109 | Binyak Parigarh . . . | 19 M | 55 | 64 | 64 | 128 | 37 | 11 | 25 | 66 | 66 | 132 | 54 | 15 | 35 |
| 110 | Ghansham Pande . . . | 30 M | 49 | 58 | 58 | 116 | 42 | 12 | 30 | 60 | 60 | 120 | 51 | 15 | 30 |
| 111 | Jagannath Panigrah . . . | 26 M | 55 | 74 | 74 | 148 | 54 | 12 | 30 | 64 | 64 | 128 | 52 | 16 | 30 |
| 112 | Rangwati Devi . . . | 20 F | 59 | 80 | 80 | 160 | 35 | 11 | 22 | 68 | 68 | 136 | 46 | 15 | 30 |
| 113 | Sulluna Devi . . . | 23 F | 59 | 80 | 80 | 160 | 34 | 13 | 25 | 68 | 68 | 136 | 49 | 16 | 30 |
| 114 | Mitka Devi . . . | 22 F | 58 | 78 | 78 | 156 | 49 | 13 | 30 | 66 | 66 | 132 | 58 | 15 | 35 |
| 115 | Api Devi . . . | 24 F | 59 | 80 | 80 | 160 | 50 | 15 | 30 | 68 | 68 | 136 | 61 | 15 | 35 |
| 116 | Babaji Panigrahi . . . | 22 M | 28 | 48 | 48 | 96 | 20 | 17 | 15 | 64 | 64 | 128 | 54 | 18 | 30 |
| 117 | Panchu Pradharn . . . | 27 M | 28 | 48 | 48 | 96 | 26 | 13 | 15 | 64 | 64 | 128 | 54 | 17 | 30 |
|  | TOTAL . . . |  |  |  |  |  |  |  |  |  |  | 12,614 | 5,302 |  |  |

Date of starting : 19-1-56

Name of Parishramalaya : **Raipur Maniharam (Gujerat)**

No. of Charkha sets : 19

| S. No. | Name of operative | Class of Spinner Age-sex | No. of days of Trg. | From 10th March 56 to 27th March, 56 | | | | | | From 28th March to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Feluramji . . . | | 70 | 36 | 36 | 72 | 51 | 13 | 12 | 52 | 52 | 104 | 59 | 12 | 10 |
| 2 | Janeshwarprasad . . . | 20 M | 64 | 28 | 28 | 56 | 54 | 14 | 10 | 61 | 59 | 120 | 129 | 13 | 25 |
| 3 | Sarchand . . . | 23 M | 72 | 60 | 60 | 120 | 155 | 14 | 35 | 61 | 59 | 120 | 150 | 14 | 25 |
| 4 | Ambicaprasadsinh . . . | 20 M | 72 | 60 | 60 | 120 | 93 | 93 | 22 | 60 | 57 | 117 | 97 | 13 | 15 |
| 5 | Rajendra Kumar . . . | 19 M | 62 | 24 | 24 | 48 | 37 | 14 | 5 | 40 | 40 | 80 | 72 | 14 | 12 |
| 6 | Gangacharan . . . . | 20 M | 65 | 60 | 60 | 120 | 77 | 15 | 16 | 29 | 29 | 58 | 52 | 13 | 7 |
| 7 | Shambhulal . . . . | 23 M | 76 | 60 | 60 | 120 | 105 | 13 | 30 | 52 | 56 | 108 | 104 | 14 | 20 |
| 8 | Sukhvirsinh . . . . | 20 M | 74 | 60 | 60 | 120 | 105 | 13 | 30 | 48 | 52 | 100 | 101 | 18 | 20 |
| 9 | Madanlal . . . . | 20 M | 75 | 60 | 60 | 120 | 72 | 13 | 15 | 60 | 60 | 120 | 85 | 13 | 20 |
| 10 | Jaibhagvan . . . . | 20 M | 63 | 28 | 28 | 56 | 30 | 12 | 5 | 48 | 48 | 96 | 64 | 13 | 15 |
| 11 | Vedpal . . . . | 20 M | 61 | 60 | 60 | 120 | 79 | 13 | 25 | 52 | 52 | 104 | 70 | 13 | 61 |
| 12 | Rameshwarprasad . . . | 20 M | 75 | 60 | 60 | 120 | 72 | 14 | 15 | 56 | 56 | 112 | 66 | 12 | 10 |
| 13 | Kashiram . . . . | 20 M | 62 | 24 | 24 | 48 | 44 | 15 | 10 | 44 | 48 | 92 | 75 | 14 | 10 |
| 14 | Hukumsinh . . . . | 20 M | 62 | 20 | 20 | 40 | 40 | 14 | 5 | 44 | 44 | 88 | 67 | 14 | 12 |
| 15 | Nathiram . . . . | 22 M | 64 | 60 | 60 | 120 | 57 | 12 | 15 | 20 | 20 | 40 | 21 | 12 | 7 |
| 16 | Naklisinh . . . . | 30 M | 64 | 60 | 60 | 120 | 125 | 16 | 25 | 60 | 58 | 118 | 115 | 15 | 3 |
| 17 | Chandramasinh . . . . | 22 M | 76 | 60 | 60 | 120 | 29 | 12 | 20 | 60 | 56 | 116 | 104 | 13 | 15 |
| 18 | Shrinivasram . . . . | 20 M | 71 | 60 | 60 | 120 | 95 | 13 | 22 | 60 | 55 | 115 | 101 | 12 | 16 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Visambarsinh . . . . . | 21 M | 74 | 60 | 60 | 120 | 67 | 15 | 18 | 60 | 60 | 120 | 63 | 13 | 10 |
| 20 | Brahmanand . . . . . | 20 M | 75 | 60 | 60 | 120 | 91 | 15 | 20 | 60 | 59 | 119 | 103 | 14 | 20 |
| 21 | Premchand . . . . . | 19 M | 59 | 60 | 60 | 120 | 54 | 12 | 12 | 24 | 24 | 48 | 44 | 13 | 7 |
| 22 | Ratanlal . . . . . | 22 M | 75 | 60 | 60 | 120 | 85 | 12 | 22 | 60 | 60 | 120 | 83 | 13 | 15 |
| 23 | Balwantsinh . . . . . | 20 M | 60 | 60 | 60 | 120 | 76 | 13 | 20 | 24 | 24 | 48 | 32 | 12 | 5 |
| 24 | Tejpalsinh . . . . . | 24 M | 55 | 60 | 60 | 120 | 61 | 15 | 15 | 60 | 60 | 120 | 81 | 12 | 15 |
| 25 | Pahalsinh . . . . . | 22 M | 69 | 40 | 40 | 80 | 43 | 12 | 10 | 60 | 60 | 120 | 59 | 15 | 10 |
| 26 | Teturam . . . . . | 21 M | 70 | 44 | 44 | 48 | 46 | 12 | 9 | 60 | 60 | 120 | 60 | 11 | 10 |
| 27 | Sarjitsinh . . . . . | 20 M | 60 | 56 | 56 | 112 | 49 | 11 | 10 | 40 | 40 | 80 | 44 | 11 | 7 |
| 28 | Virbalsinh . . . . . | 20 M. | 60 | 60 | 60 | 120 | 104 | 14 | 25 | 20 | 20 | 40 | 49 | 16 | 7 |
| 29 | Suklamangal . . . . . | 20 M | 73 | 60 | 60 | 120 | 87 | 20 | 15 | 60 | 60 | 120 | 65 | 13 | 10 |
| 30 | Chhelbihari sinh . . . . | 21 M | 76 | 60 | 60 | 120 | 93 | 13 | 26 | 60 | 58 | 128 | 88 | 13 | 15 |
| 31 | Anandprasad . . . . . | 20 M | 60 | 52 | 52 | 104 | 51 | 12 | 8 | 40 | 40 | 80 | 44 | 12 | 7 |
| 32 | Satyadev Sharma . . . . | 20 M | 57 | 60 | 60 | 120 | 63 | 10 | 20 | 54 | 60 | 104 | 102 | 11 | 15 |
| 33 | Keshavram . . . . . | 20 M | 69 | 60 | 60 | 120 | 93 | 15 | 22 | 59 | 59 | 118 | 103 | 14 | 20 |
| 34 | Keshavprasad Pande . . . | 20 M | 49 | 60 | 60 | 120 | 86 | 12 | 36 | 36 | 36 | 72 | 46 | 13 | 7 |
| 35 | Mitthanlal . . . . . | 21 M | 51 | 60 | 60 | 120 | 94 | 14 | 20 | 48 | 48 | 96 | 81 | 14 | 15 |
| 36 | Gajrajsinh . . . . . | 16 M | 43 | 60 | 60 | 120 | 44 | 13 | 13 | 20 | 20 | 40 | 27 | 13 | 5 |
| 37 | Motilal . . . . . | 19 M | 37 | 60 | 60 | 120 | 39 | 12 | 15 | 8 | 8 | 16 | 12 | 14 | 12 |
|  | TOTAL . . . |  |  |  |  |  |  |  |  |  |  | 3,507 | 2,718 |  |  |

Name of Parishramalaya Mahipatram Rupram Ashram,
Outside Raipur Gate, Ahmedabad.

| S. No. | Name of Operative | Class of Spinner. Age | No. of days of Trg. | From 10th March, 56 to 27th March, 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Laxmiben Revaben | 30 | 72 | 4 | 4 | 8 | 87 | 20 | 49 | 4 | 4 | 8 | 64 | 20 | 32½ |
| 2 | Sinaben Mithiben | 24 | 16 | 4 | 4 | 8 | 89 | 20 | 50 | 4 | 4 | 8 | 63 | 22 | 31⅓ |
| 3 | Shantaben Manilal | 28 | 10 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 4 | Mangiben Narsihbhai | 30 | 3 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 5 | Sonaben Somchand | 34 | 13 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 6 | Shiviben Kantilal | 34 | 61 | 4 | 4 | 8 | 100 | 18 | 56¼ | 4 | 4 | 8 | 121 | 20 | 60 |
| 7 | Motiben Punjaji | 42 | 45 | 4 | 4 | 8 | 51 | 16 | 28¾ | 4 | 4 | 8 | 120 | 18 | 60 |
| 8 | Dabiben Kankuben | 30 | 8 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 9 | Kundanben Thakorlal | 18 | 17 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 10 | Paluben Badhabhai | 18 | 67 | 4 | 4 | 8 | 41 | 16 | 23¾ | 4 | 4 | 8 | .. | .. | .. |
| 11 | Viriben Bhimjibhai | 16 | 67 | 4 | 4 | 8 | 50 | 16 | 28 | 4 | 4 | 6 | 11 | 16 | 5 |
| 12 | Kashiben Naranbhai | 30 | 74 | 4 | 4 | 8 | 75 | 24 | 42 | 4 | 4 | 8 | 44 | 24 | 22 |
| 13 | Savitaben Sakalchand | 20 | 74 | 4 | 4 | 8 | 21 | 16 | 13½ | 4 | 4 | 8 | 26 | 18 | 18 |
| 14 | Lalitaben Maganlal | 30 | 82 | 4 | 4 | 8 | 12 | 22 | 23½ | 4 | 4 | 8 | 115 | 24 | 57 |
| 15 | Jibaben Govindji | 30 | 73 | 4 | 4 | 8 | 78 | 22 | 44½ | 4 | 4 | 8 | 13 | 22 | 6½ |
| 16 | Laxmiben Ratilal | 20 | 33 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 17 | Rupaliben Tulsidas | 35 | 73 | 4 | 4 | 8 | 63 | 20 | 35½ | 4 | 4 | 8 | 84 | 32 | 42 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Manjulben Bhudardas . . | 16 | 82 | 4 | 4 | 8 | 32 | 20 | 18 | 4 | 4 | 8 | 7 | 20 | 3½ |
| 19 | Vimalaben Bhudardas . . | 18 | 72 | 4 | 4 | 8 | 44 | 20 | 24¼ | 4 | 4 | 8 | 81 | 20 | 40½ |
| 20 | Madhuben Kankuben . . | 20 | 82 | 4 | 4 | 8 | 62 | 20 | 35 | 4 | 4 | 8 | 78 | 22 | 39 |
| 21 | Paniben Pitamberdas . . | 34 | 62 | 4 | 4 | 8 | 27 | 18 | 22 | 4 | 4 | 8 | .. | .. | .. |
| 22 | Narbdaben Savjibhai . . | 18 | 44 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 23 | Kashiben Motibhai . . . | 18 | 43 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 24 | Kantaben Vallabhabhai . . | 18 | 2 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 25 | Narbdaben Huberdas . . | 18 | 43 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 26 | Beniben Muljibhai . . . | 18 | 85 | 4 | 4 | 8 | 36 | 22 | 20 | 4 | 4 | 8 | 106 | 22 | 53 |
| 27 | Punamben Hariprasad . . | 18 | 82 | 4 | 4 | 8 | .. | 20 | 14½ | 4 | 4 | 8 | 39 | 20 | 19½ |
| 28 | Daniben Bhagwandas . . | 22 | 76 | 4 | 4 | 8 | 6 | 20 | 3¼ | 4 | 4 | 8 | 18 | 20 | 8½ |
| 29 | Gomtiben Trikamlal . . . | 40 | 81 | 4 | 4 | 8 | 64 | 20 | 19 | 4 | 4 | 8 | 49 | 24 | 24½ |
| 30 | Narmdaben Mohanlal . . | 16 | 82 | 4 | 4 | 8 | 94 | 20 | 47 | 4 | 4 | 8 | 28 | 22 | 14 |
| 31 | Punjiben Vadilal . . . | 18 | 27 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 32 | Hiraben Shamji . . . | 16 | 9 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 33 | Rajiben Keshavlal . . . | 16 | 4 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 34 | Shantaben Navinchandra . . | 24 | 85 | 4 | 4 | 8 | 23 | 20 | 11½ | 4 | 4 | 8 | 65 | 22 | 32¼ |
| 35 | Shantan . . . . . . | 20 | 85 | 4 | 4 | 8 | 50 | 22 | 25 | 4 | 4 | 8 | 110 | 20 | 55 |
| 36 | Chaturiben Chaganlal . . | 18 | 85 | 4 | 4 | 8 | 50 | 22 | 25 | 4 | 4 | 8 | 57 | 22 | 88 |
| 37 | Shantaben Prabhashanker . . | 16 | 84 | 4 | 4 | 8 | 69 | 20 | 34½ | 4 | 4 | 8 | 62 | 20 | 31 |
| 38 | Kamalaben Nathalal . . . | 24 | 81 | 4 | 4 | 8 | 51 | 22 | 25½ | 4 | 4 | 8 | 65 | 22 | 32½ |
| 39 | Champaben Ambalal . . . | 20 | 26 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 40 | Rambhaben Tolji . . . | 22 | 68 | 4 | 4 | 8 | 70 | 18 | 8½ | 4 | 4 | 8 | 101 | 20 | 50 |
| 41 | Fatmaben Lalkha . . . | 20 | 85 | 4 | 4 | 8 | 32 | 20 | 16 | 4 | 4 | 9 | 119 | 22 | 50 |
| 42 | Madhukanta Lallubhai . . | 20 | 27 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 43 | Jasumatiben Jivanlal . . | 28 | 43 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | 140 | .. | .. |
| 44 | Taraben Bhagwandas . . | 28 | 74 | 4 | 4 | 8 | 31 | 20 | 15½ | 4 | 4 | 8 | 110 | 22 | 50 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Gangaben Kidubhai | 20 | 84 | 4 | 4 | 8 | 55 | 20 | 27½ | 4 | 4 | 8 | 72 | 22 | 35 |
| 46 | Baluben Viraji | 20 | 85 | 4 | 4 | 8 | 40 | 20 | 20½ | 4 | 4 | 8 | 107 | 21 | 53 |
| 47 | Rupaben Amarsingh | 22 | 83 | 4 | 4 | 8 | 35 | 22 | 12½ | 4 | 4 | 8 | 171 | 20 | 55 |
| 48 | Nandaben Talsi | 22 | 83 | 4 | 4 | 8 | 51 | 20 | 25½ | 4 | 4 | 8 | 97 | 18 | 42 |
| 49 | Shri Sitaben Jordas | 30 | 83 | 4 | 4 | 8 | 26 | 20 | 13 | 4 | 4 | 8 | 145 | 20 | 42 |
| 50 | Jasodaben Parsottamdas | 22 | 37 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 51 | Svitaben Amratlal | 30 | 72 | 4 | 4 | 8 | 50 | 20 | 25 | 4 | 4 | 8 | 75 | 22 | 18 |
| 52 | Soniben Bhudardas | 30 | 81 | 4 | 4 | 8 | 57 | 20 | 28½ | 4 | 4 | 8 | 84 | 20 | 42 |
| 53 | Maniben Punamchand | 32 | 39 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 54 | Gangaben Mithiben | 32 | 70 | 4 | 4 | 8 | 39 | 18 | 19½ | 4 | 4 | 8 | 154 | 20 | 77 |
| 55 | Manguben Manilal | 22 | 75 | 4 | 4 | 8 | 44 | 22 | 22 | 4 | 4 | 8 | 138 | 20 | 69 |
| 56 | Divaben Maniben | 34 | 69 | 4 | 4 | 8 | 23 | 18 | 11½ | 4 | 4 | 8 | 186 | 20 | 34 |
| 57 | Savitaben Pitamberdas | 22 | 75 | 4 | 4 | 8 | 33 | 20 | 16½ | 4 | 4 | 8 | 138 | 20 | 69 |
| 58 | Laxmiben Revabhai | 20 | 62 | 4 | 4 | 8 | 28 | .. | 14 | 4 | 4 | 8 | 153 | 20 | 51 |
| 59 | Manguben Mafatlal | 16 | 71 | 4 | 4 | 8 | 64 | 18 | 32 | 4 | 4 | 8 | 106 | 18 | 53 |
| 60 | Ratanben Amrabhai | 28 | 82 | 4 | 4 | 8 | 21 | 14 | 10½ | 4 | 4 | 8 | 51 | 16 | 2½ |
| 61 | Kalavatiben Gonvindbhai | 16 | 82 | 4 | 4 | 8 | 53 | 16 | 26½ | 4 | 4 | 8 | 115 | 16 | 56½ |
| 62 | Kapilaben Jivraj | ·16 | 81 | 4 | 4 | 8 | 73 | 18 | 38 | 4 | 4 | 8 | 88 | 18 | 44 |
| 63 | Shantaben Samuben | 18 | 82 | 4 | 4 | 8 | 98 | 16 | 39 | 4 | 4 | 8 | 59 | 16 | 29½ |
| 64 | Samuben Virabhai | 32 | 81 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | 1 | 18 | 42 |
| 65 | Shantaben Kanjibhai | 18 | 69 | 4 | 4 | 8 | 24 | 18 | 12 | 4 | 4 | 8 | 168 | 18 | 84 |
| 66 | Jadiben Bhanabhai | 16 | 83 | 4 | 4 | .. | 44 | 16 | 22 | 4 | 4 | 8 | 45 | 16 | 22½ |
| 67 | Chanchalben Mangubhai | 18 | 9 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 68 | Revaben Somabhai | 34 | 64 | 4 | 4 | 8 | 79 | 14 | 39½ | 4 | 4 | 8 | 59 | 18 | 29 |
| 69 | Sushilaben Babulal | 22 | 65 | 4 | 4 | 8 | 64 | 20 | 32 | 4 | 4 | 8 | 115 | 20 | 57½ |
| 70 | Jiviben Valiben | 20 | 7 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 71 | Savitaben Khodabhai | 24 | 37 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 72 | Gomtiben Punjabhai | 35 | 82 | 4 | 4 | 8 | 105 | 18 | 52½ | 4 | 4 | 8 | 67 | 20 | 35 |
| 73 | Mithiben Paniben | 30 | 7 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74 | Khaniben Jugaldas . . . | 34 | 11 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 75 | Dahiben Revaben . . . | 16 | 29 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 76 | Daniben Kankuben . . . | 18 | 33 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 77 | Maniben Gagaben . . . | 24 | 42 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 78 | Manguben Jivaben . . . | 28 | 74 | 4 | 4 | 8 | 84 | 18 | 42 | 4 | 4 | 8 | 78 | 16 | 39 |
| 79 | Punjiben Jivabhai . . . | 26 | 64 | 4 | 4 | 8 | 74 | 20 | 37 | 4 | 4 | 8 | 60 | 16 | 31 |
| 80 | Nanduben Gandabhai . . | 18 | 10 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 81 | Shantaben Maniben . . . | 24 | 26 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 82 | Laxmiben Hirabhai . . . | 32 | 79 | 4 | 4 | 8 | 48 | 18 | 24 | 4 | 4 | 8 | 47 | 18 | 23½ |
| 83 | Babuben Dahiben . . . | 30 | 80 | 4 | 4 | 8 | 68 | 16 | 33 | 4 | 4 | 8 | 112 | 16 | 56 |
| 84 | Vanilaben Jayprasad . . . | 22 | 28 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 85 | Prabhavatiben C . . . | 18 | 17 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | .. | .. | .. |
| 86 | Ramiben Sunderben . . . | 34 | 79 | 4 | 4 | 8 | 89 | 16 | 44½ | 4 | 4 | 8 | 97 | 16 | 48½ |
| 87 | Dahiben Somabhai . . . | 16 | 82 | 4 | 4 | 8 | 52 | 18 | 26 | 4 | 4 | 8 | 113 | 18 | 56½ |
| 88 | Ichaben Devabhai . . . | 30 | 2 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | 8 | 16 | 4 |
| 89 | Harkhaben Hematsing . . | 35 | 28 | 4 | 4 | 8 | .. | .. | .. | 4 | 4 | 8 | 11 | 16 | 5½ |
| 90 | Naniba Hematsing . . . | 30 | 21 | 4 | 4 | 8 | 32 | 18 | 16 | 4 | 4 | 8 | 24 | 18 | 12 |
| 91 | Kesharben Natthubhai . . | 18 | 25 | 4 | 4 | 8 | 20 | 16 | 10½ | 4 | 4 | 8 | .. | .. | .. |
| 92 | Gangaben Dhyabhai . . . | 32 | 73 | 4 | 4 | 8 | 105 | 20 | 52½ | 4 | 4 | 8 | 79 | 18 | 39½ |
| 93 | Champaben Pursottamdas . . | 22 | 56 | 4 | 4 | 8 | 45 | 18 | 22½ | 4 | 4 | 8 | 152 | 16 | 66 |
| 94 | Gomtiben Gigabhai . . . | 34 | 65 | 4 | 4 | 8 | 82 | 18 | 41 | 4 | 4 | 8 | 86 | 18 | 43 |
|  | TOTAL . . |  |  |  |  |  |  |  |  |  |  | 752 | 4,632 |  |  |

Name of Parishramalaya : Mahipatram Rupram Anathashram
Outside Raipur Gate, Ahmedabad.

| S. No. | Name of Operative | Class of spinner Age | No. of days of Trg. | From 10th March, 56 to 27th March, 56 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March to 13th April, 1956 Duration of work (Hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Bhaniben Ramjibhai | 25 | 12 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 2 | Ratanben Lallubhai | 30 | 14 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 3 | Mithiben Ramjibhai | 24 | 42 | 2 | 2 | 4 | 37 | 16 | 23½ | 2 | 2 | 4 | 39 | 18 | 17 |
| 4 | Dhaniben Chaganlal | 22 | 48 | 2 | 2 | 4 | 55 | 18 | 31 | 2 | 2 | 4 | 21 | 18 | 9¼ |
| 5 | Devindra Jamnadas | 20 | 2 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 6 | Shantaben Maneklala | 24 | 10 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 7 | Harshaben Jayprasad | 20 | 10 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 8 | Maniben Shantilal | 30 | 66 | 2 | 2 | 4 | 42 | 17 | 21 | 2 | 2 | 4 | 43 | 17 | 18¾ |
| 9 | Hiraben Naranlal | 30 | 34 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 10 | Baluben Ramjibhai | 20 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 11 | Shantaben Madhavlal | 18 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 12 | Prabhaben Hargovind | 18 | 11 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 13 | Dayaben Kanubhai | 24 | 65 | 2 | 2 | 4 | 44 | 17 | 32¼ | 2 | 2 | 4 | 54 | 20 | 23¼ |
| 14 | Parvatiben Nathalal | 22 | 2 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 15 | Nandakini Pratapbhai | 28 | 2 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 16 | Lakhuben Oghadbhai | 32 | 23 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 17 | Shardaben Ratilal | 18 | 7 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 18 | Sudhaben Maneklal | 14 | 73 | 2 | 2 | 4 | 36 | 16 | 17¾ | 2 | 2 | 4 | 25 | 19 | 11 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Phanumatiben Ramesh . . | 20 | 74 | 2 | 2 | 4 | 31 | 16 | 15½ | 2 | 2 | 4 | 86 | 20 | 37¾ |
| 20 | Kumudben Ramamlal . . | 26 | 70 | 2 | 2 | 4 | 24 | 17 | 22 | 2 | 2 | 4 | 62 | 20 | 27 |
| 21 | Nilaben Ramanlal . . . | 22 | 69 | 2 | 2 | 4 | 21 | 17 | 19½ | 2 | 2 | 4 | 69 | 20 | 30¼ |
| 22 | Sitaben Kuberdas . . . | 35 | 71 | 2 | 2 | 4 | 48 | 18 | 24 | 2 | 2 | 4 | 61 | 19 | 26¾ |
| 23 | Taraben Parsottamdas . . | 24 | 9 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 24 | Savitaben Maganlal . . . | 28 | 8 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 25 | Santaben Maganlal . . . | 28 | 32 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 26 | Kamalaben Atmaram . . | 28 | 68 | 2 | 2 | 4 | 30 | 20 | 15 | 2 | 2 | 4 | 62 | 18 | 27 |
| 27 | Kantaben Bhagwandas . . | 24 | 2 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 28 | Sitaben Shantilal . . . | 40 | 69 | 2 | 2 | 4 | 44 | 18 | 32½ | 2 | 2 | 4 | 65 | 19 | 28½ |
| 29 | Sushilaben Naranbhai . . | 22 | 68 | 2 | 2 | 4 | 46 | 19 | 23½ | 2 | 2 | 4 | 36 | 20 | 15¼ |
| 30 | Pravatiben Laljibhai . . . | 23 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 31 | Somiben Chandulal . . . | 30 | 72 | 2 | 2 | 4 | 44 | 19 | 32¼ | 2 | 2 | 4 | 39 | 20 | 19 |
| 32 | Manjulaben Shantilal . . . | 22 | 12 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 33 | Vinodaben Chandrakant . . | 30 | 40 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 34 | Chanchalben Meghji . . . | 32 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 35 | Sarojben Gordhandas . . | 22 | 11 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 36 | Vinayabala Chandrakant . . | 28 | 8 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 37 | Shardaben Shantilala . . . | 24 | 10 | 2 | 2 | 4 | .. | .. |  | 2 | 2 | 4 | .. | .. | .. |
| 38 | Pushpaben Pursotamdas . . | 22 | 63 | 2 | 2 | 4 | 19 | 16 | 4½ | 2 | 2 | 4 | 96 | 19 | 42 |
| 39 | Sunandaben Zankhibhai . . | 18 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 40 | Bhartiben Bhrugurlal . . . | 22 | 54 | 2 | 2 | 4 | 17 | 17 | 8½ | 2 | 2 | 4 | 81 | 20 | 35½ |
| 41 | Shantaben Shankerlal . . | 35 | 72 | 2 | 2 | 4 | 15 | 16 | 7½ | 2 | 2 | 4 | 76 | 20 | 53¼ |
| 42 | Bhuriben Shivram . . . | 32 | 12 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 43 | Divaben Motiji . . . . | 28 | 70 | 2 | 2 | 4 | 26 | 17 | 13 | 2 | 2 | 4 | 11 | 16 | 4¾ |
| 44 | Kesharben Atmaram . . . | 30 | 39 | 2 | 2 | 4 | 4 | 16 | 2 | 2 | 2 | 4 | 9 | 16 | 19 |
| 45 | Dabiben Nanji . . . . | 18 | 2 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 46 | Kantaben Jadvji . . . . | 28 | 11 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | Kamjiben Ishwarlal | 28 | 10 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 48 | Hiraben Malji | 30 | 69 | 2 | 2 | 4 | 13 | 17 | 6½ | 2 | 2 | 4 | 84 | 20 | 36¼ |
| 49 | Shardaben Mohanlal | 28 | 12 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 50 | Diwaliben Dharmshi | 32 | 13 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 51 | Taraben Pitamberdas | 18 | 10 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 52 | Hiraben Payabhai | 32 | 64 | 2 | 2 | 4 | 3 | 16 | 1½ | 2 | 2 | 4 | 87 | 18 | 37 |
| 53 | Pushpaben Ravishanker | 22 | 40 | 2 | 2 | 4 | 70 | 20 | 35 | 2 | 2 | 4 | 23 | 18 | 10 |
| 54 | Premilaben Shanker | 24 | 42 | 2 | 2 | 4 | 22 | 19 | 11 | 2 | 2 | 4 | 83 | 19 | 35¼ |
| 55 | Savitriben Vinaydeo | 24 | 69 | 2 | 2 | 4 | 48 | 18 | 24 | 2 | 2 | 4 | 35 | 16 | 15¼ |
| 56 | Pushpaben Mohanlal | 22 | 7 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 57 | Maniben Jitubhai | 34 | 71 | 2 | 2 | 4 | 27 | 18 | 13½ | 2 | 2 | 4 | 61 | 20 | 26¼ |
| 58 | Champaben Vashram | 20 | 55 | 2 | 2 | 4 | 10 | 16 | 5 | 2 | 2 | 4 | 89 | 20 | 39 |
| 59 | Gomtiben Gagji | 35 | 61 | 2 | 2 | 4 | 19 | 17 | 9½ | 2 | 2 | 4 | 101 | 18 | 44½ |
| 60 | Durgaben Vinodray | 28 | 64 | 2 | 2 | 4 | 32 | 18 | 16 | 2 | 2 | 4 | 66 | 19 | 29 |
| 61 | Atilaxmi Naranbhai | 28 | 65 | 2 | 2 | 4 | 20 | 18 | 10 | 2 | 2 | 4 | 81 | 20 | 35½ |
| 62 | Manoramaben Naranbhai | 16 | 52 | 2 | 2 | 4 | 22 | 17 | 4½ | 2 | 2 | 4 | .. | .. | .. |
| 63 | Champaben Manilal | 30 | 55 | 2 | 2 | 4 | 20 | 16 | 10 | 2 | 2 | 4 | 31 | 18 | 13½ |
| 64 | Godavriben Lallubhai | 30 | 14 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 65 | Hashmukhben Harishkr | 18 | 15 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 66 | Maniben Somabhai | 35 | 50 | 2 | 2 | 4 | 18 | 16 | 9 | 2 | 2 | 4 | 47 | 18 | 20½ |
| 67 | Maniben Naranbhai | 48 | 21 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 68 | Chandrakantaben M. | 40 | 39 | 2 | 2 | 4 | 3 | 16 | 1½ | 2 | 2 | 4 | 17 | 18 | 4½ |
| 69 | Jasusben Ranjit Kr. | 22 | 17 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 70 | Maniben Ramjibhai | 40 | 59 | 2 | 2 | 4 | 28 | 16 | 14 | 2 | 2 | 4 | 80 | 19 | 15 |
| 71 | Kunjabala Devendrakumar | 24 | 18 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 72 | Indiraben Hariprasad | 18 | 8 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 73 | Promilaben Manubhai | 28 | 41 | 2 | 2 | 4 | 23 | 18 | 11½ | 2 | 2 | 4 | 86 | 20 | 37½ |
| 74 | Nirmalaben Jiwanlal | 24 | 10 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| 75 | Parsonben Manilal | 28 | 4 | 2 | 2 | 4 | .. | .. | .. | 2 | 2 | 4 | .. | .. | .. |
| | TOTAL | | | | | | | | | | | 300 | 2,206 | | |

Name of Parishramalaya : Nadiad (Gujerat)

No. of Charkha sets : 40
Date of starting : 9/1/56

| S.No. | Name of Operative | Class of Spinner | No. of days of Trg. | From 10th March, 56 to 27th March 56 | | | | | | From 28th March, 56 to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age-sex | | | | | | | | | | | | | |
| 1 | Ramijabadan Manilal | 27 M | 75 | 50 | 38 | 88 | 35 | 18 | 7 | 50 | 58 | 10 | 73 | 20 | 46½ |
| 2 | Karpashtran Dasabhali | 20 M | 48 | 56 | 48 | 104 | 35 | 18 | 24¼ | 34 | 46 | 90 | 36½ | 18 | 16½ |
| 3 | Dhulibadan Laljibhai | 37 M | 78½ | 62 | 50 | 112 | 80 | 20 | 24¼ | 58 | 50 | 108 | 77 | 20 | 7½ |
| 4 | Mariambadan Vithal | 30 M | 79 | 64 | 48 | 112 | 97 | 20 | 5¾ | 62 | 50 | 112 | 67 | 22 | 6¾ |
| 5 | Vabubadan Tiralal | 22 M | 80½ | 32 | 50 | 112 | 87 | 20 | 3½ | 60 | 60 | 120 | 66 | 22 | ½ |
| 6 | Manabadan Danachel | 25 M | 74½ | 30 | 26 | 56 | 26 | 20 | 6½ | 65 | 55 | 120 | 79 | 18 | 8¾ |
| 7 | Managabadan Danaja | 28 M | 75½ | 62 | 50 | 112 | 68½ | 20 | 36½ | 52 | 56 | 108 | 78½ | 20 | 4 |
| 8 | Sonabadan | 25 M | 76 | 56 | 48 | 104 | 61½ | 20 | 10¾ | 52 | 68 | 120 | 86 | 22 | 4¾ |
| 9 | Darabadan Kashaolal | 25 M | 61½ | 50 | 46 | 96 | 41½ | 20 | 19¾ | 52 | 60 | 112 | 76 | 22 | 23¾ |
| 10 | Ashabadan | 28 M | 75 | 62 | 50 | 112 | 55 | 21 | 11½ | 53 | 51 | 104 | 82½ | 21 | 4 |
| 11 | Bhakhadabadan Bevja | 30 M | 75½ | 60 | 52 | 112 | 54 | 10 | 2 | 64 | 56 | 120 | 104 | 20 | 17½ |
| 12 | Mariahaban | 35 M | 71½ | 56 | 54 | 112 | 24 | 20 | 1¾ | 57 | 63 | 120 | 93 | 22 | 15¼ |
| 13 | Palibadan Umed | 40 M | 71 | 60 | 52 | 112 | 32 | 14 | 3¼ | 57 | 36 | 93 | 103 | 19 | 30¾ |
| 14 | Amarbadan Shapa | 19 M | 77½ | 61 | 51 | 112 | 60 | 18 | 33½ | 60 | 60 | 120 | 126 | 22 | 4¾ |
| 15 | Manakabadan Danalal | 25 M | 55 | 56 | 48 | 104 | 51 | 22 | 60½ | 62 | 28 | 120 | 106 | 22 | 43 |
| 16 | Premb Trikam | 37 M | 74 | 58 | 54 | 112 | 74 | 22 | 11¾ | 63 | 57 | 120 | 117 | 24 | 3¼ |
| 17 | Kesharbadan Ramji | 26 M | 75 | 68 | 44 | 112 | 46 | 18 | 19½ | 59 | 62 | 122 | 91 | 20 | 30⅜ |
| 18 | Kathab Gala | 49 M | 71 | 59 | 3 | 112 | 46 | 16 | 9¾ | 55 | 57 | 112 | 55 | 20 | 26¾ |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Marthab Soma . . . . | 30 | M | 80½ | 60 | 52 | 112 | 65 | 18 | 6½ | 65 | 55 | 20 | 71½ | 20 | 1 |
| 20 | Sharadabadan Javer . . . | 23 | M | 78 | 58 | 54 | 112 | 58 | 20 | 6¾ | 54 | 62 | 116 | 86 | 20 | 2½ |
| 21 | Sudhabadan G. Patel . . . | 21 | M | 51 | 79 | 42 | 112 | 33 | 20 | 28½ | 52 | 48 | 100 | 61 | 20 | 32½ |
| 22 | Sukhirab Chandulal . . . | 27 | M | 70 | 60 | 52 | 112 | 78 | 18 | 3¾ | 64 | 58 | 122 | 64 | 18 | 7¼ |
| 23 | Bhadrabalal C. Trivedi . . | 28 | M | 57 | 59 | 53 | 112 | 71 | 20 | 8¾ | 60 | 60 | 120 | 113 | 18 | 14½ |
| 24 | Manibadan Ishwar . . . | 29 | M | 50 | 20 | 12 | 32 | 20 | 26 | 22¼ | 56 | 40 | 96 | 37 | 26 | ½ |
| 25 | Ganaga B. Bhulja . . . | 40 | M | 73½ | 57 | 65 | 122 | 50 | 18 | 3¾ | 60 | 52 | 112 | 50 | 18 | 3¾ |
| 26 | Jetha B. Koya . . . . | 40 | M | 68½ | 59 | 53 | 112 | 43 | 22 | 3¾ | 52 | 60 | 112 | 32 | 16 | 1¼ |
| 27 | Jetha B. Kuber . . | 46 | M | 69½ | 65 | 57 | 122 | 32 | 14 | 1½ | 58 | 62 | 120 | 43 | 21 | 3¾ |
| 28 | Mani B. Kantialal . . . | 23 | M | 70½ | 58 | 50 | 108 | 43 | 22 | 4½ | 63 | 57 | 120 | 45 | 21 | 4¼ |
| 29 | Ruth B. Kadubhai . . . | 38 | M | 56½ | 54 | 50 | 104 | 37 | 22 | 2¾ | 52 | 48 | 100 | 40 | 20 | 3½ |
| 30 | Manjala B. Dasbhai . . . | 17 | M | 51½ | 57 | 55 | 112 | 45 | 22 | 27½ | 63 | 79 | 142 | 68 | 24 | 24¾ |
| 31 | Shanta Kantilal Patel . . . | 33 | M | 58½ | 60 | 52 | 112 | 81 | 20 | 9¾ | 58 | 58 | 116 | 85 | 20 | 4½ |
| 32 | Rasmukh Mahesh Patel . . | 21 | M | 78 | 58 | 50 | 108 | 33 | 20 | 46½ | 50 | 60 | 116 | 20½ | 18 | .. |
| 33 | Indubai Ambalal Bhat . . | 35 | M | 74 | 58 | 54 | 112 | 72 | 22 | 12½ | 53 | 55 | 108 | 78 | 22 | 4¾ |
| 34 | Paulbhai . . . . | 30 | M | 79½ | 57 | 55 | 112 | 84 | 20 | 44¼ | 57 | 55 | 112 | 48 | 20 | 1½ |
| 35 | Iswar Kamabhai . . . | 30 | M | 77½ | 59 | 53 | 112 | 66 | 18 | 11¾ | 59 | 50 | 108 | 79 | 18 | 4½ |
| 36 | Chamanlal Patel . . . | 22 | M | 76½ | 60 | 52 | 112 | 76 | 20 | 4¾ | 35 | 45 | 80 | 36 | 18 | 11½ |
| 37 | Mulji Lalji . . . . | 35 | M | 81½ | 50 | 50 | 100 | 78 | 20 | 4¾ | 62 | 58 | 120 | 67 | 20 | 16½ |
| 38 | Khodalalji . . . . | 30 | M | 81 | 62 | 52 | 114 | 49 | 49 | 2 | 2 | 56 | 60 | 116 | 20 | ¾ |
| 39 | Ratilal Maganlal. . . . | 18 | M | 71½ | 58 | 50 | 108 | 81 | 20 | 9¾ | 60 | 60 | 120 | 70 | 22 | 2¾ |
| 40 | Rameshchandra Patel . . . | 22 | M | 77 | 60 | 40 | 100 | 64 | 20 | 19¼ | 40 | 48 | 89 | 86 | 20 | 11¼ |
| 41 | Satyendra P. Manilal . . . | 19 | M | 75 | 55 | 54 | 109 | 47 | 17 | 40¾ | 66 | 50 | 116 | 71 | 20 | 5¾ |
| 42 | Purushotam S. Patel . . . | 29 | M | 74½ | 55 | 45 | 100 | 60 | 17 | 6 | 70 | 50 | 120 | 91 | 22 | 4¼ |
| 43 | Ramanlal P. Patel . . . | 22 | M | 77½ | 50 | 50 | 100 | 106 | 18 | 5¼ | 52 | 40 | 92 | 21 | 20 | 3¼ |
| 44 | Reshvlal M. Pathak . . . | 24 | M | 76 | 62 | 52 | 114 | 87 | 22 | 10 | 45 | 55 | 100 | 50 | 20 | 8¼ |
| 45 | Salubhai Kalidas . . . | 20 | M | 76 | 65 | 40 | 113 | 41 | 28 | 10½ | 52 | 60 | 112 | 53½ | 22 | 5¾ |
| 46 | Atmaram Phula . . . | 18 | M | 68½ | 54 | 50 | 104 | 54 | 20 | 31¼ | 60 | 52 | 112 | 61 | 24 | 10½ |
| 47 | Kalidas Rana . . . . | 24 | M | 78½ | 54 | 50 | 104 | 58 | 20 | 16¼ | 65 | 55 | 120 | 79 | 20 | 5¼ |

| 1 | 2 | 3 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | Narsinha Phula . . . . . | 21 | M | 81½ | 62 | 50 | 112 | 66 | 20 | 2½ | 53 | 67 | 120 | 73 | 22 | 1¼ |
| 49 | Popat Somabhai Panchal . . | 16 | M | 66 | 61 | 51 | 112 | 73 | 20 | 9½ | 61 | 55 | 116 | 100 | 20 | 18¾ |
| 50 | Parasottam S. Patel . . . | 21 | M | 74 | 59 | 63 | 112 | 56 | 22 | 17½ | 56 | 40 | 96 | 63 | 20 | 15¼ |
| 51 | Bhai P. Patel . . . . | 22 | M | 79½ | 48 | 46 | 94 | 67 | 20 | 6 | 65 | 55 | 120 | 75 | 20 | 4¼ |
| 52 | Haribhai A. Patel . . . | 20 | M | 76 | 62 | 50 | 112 | 67 | 20 | 19¼ | 48 | 40 | 88 | 50 | 10 | 4¼ |
| 53 | Kanubhai G . Patel . . . | 21 | M | 78 | 62 | 50 | 112 | 65 | 21 | 20¼ | 67 | 53 | 120 | 59 | 20 | 1½ |
| 54 | Rameshchandra P. Pandya . . | 25 | M | 80 | 61 | 51 | 112 | 58 | 20 | 7¾ | 50 | 62 | 112 | 46 | 22 | 3¼ |
| 55 | Naginbhai H. Patel . . . | 85 | M | 80½ | 73 | 42 | 112 | 16 | 20 | 6½ | 85 | 55 | 120 | 30½ | 20 | ¼ |
| 56 | Chaganbhai S. Patel . . . | 30 | M | 77½ | 62 | 50 | 112 | 52 | 18 | 18 | 57 | 62 | 119 | 100½ | 10 | 13½ |
| 57 | Phulbhai H. . . . . . | 18 | M | 76½ | 60 | 40 | 100 | 40 | 21 | 8¼ | 65 | 55 | 120 | 89 | 20 | 29 |
| 58 | Jayantilal M. Pandya . . . | 80 | M | 78½ | 62 | 50 | 112 | 19½ | 18 | 44¾ | 62 | 50 | 112 | 51 | 10 | 1¾ |
| 59 | Bachu M. Sena . . . . | 18 | M | 78 | 62 | 50 | 112 | 81 | 20 | ¾ | 64 | 48 | 112 | 83 | 20 | 16¼ |
| 60 | M. Ishwar Bhat. . . . | 18 | M | 74 | 60 | 52 | 112 | 89 | 16 | 3¾ | 50 | 40 | 90 | 48 | 16 | 2½ |
| 61 | Manilal Morar . . . . | 35 | M | 71½ | 58 | 50 | 108 | 52 | 22 | 39½ | 55 | 52 | 107 | 76 | 22 | 24¾ |
| 62 | Ramu Dhula . . . . | 18 | M | 77 | 61 | 51 | 112 | 26 | 20 | 43¾ | 56 | 55 | 111 | 37 | 20 | 20¼ |
| 63 | Arvind I. Patel . . . . | 21 | M | 48 | 59 | 52 | 111 | 44 | 14 | 20 | 60 | 60 | 120 | 42 | 20 | 51¾ |
| 64 | Mo. Daud. . . . . | 21 | M | 70 | 62½ | 50 | 112½ | 65 | 20 | 12¾ | 42 | 30 | 72 | 50 | 18 | 6 |
| 65 | Shantabadan U. Patel . . | 38 | M | 75 | 30 | 26 | 56 | 56 | 20 | 2¼ | 35 | 25 | 60 | 63 | .20 | 8¾ |
| 66 | Tarabadab C. Patel . . . | 19 | M | 75 | 29 | 27 | 56 | 46 | 22 | 3½ | 25 | 35 | 60 | 59 | 18 | 8¼ |
| 67 | Kailash B.L. Patel . . . | 35 | M | 79 | 28 | 28 | 56 | 28 | 20 | 3½ | 24 | 24 | 24 | 62 | 18 | 2½ |
| 68 | Saudabadan Vazifdar . . . | 19 | M | 69 | 26 | 22 | 48 | 16 | 19 | ¼ | 12 | 8 | 20 | 10 | 20 | 30 |
| 69 | Umabadan R. Bhat . . . | 22 | M | 31 | 30 | 26 | 56 | 29 | 20 | 2½ | 11 | 17 | 28 | 22 | 22 | 1¼ |
| 70 | Ratilal S. Bhat . . . . | 35 | M | 74 | 29 | 27 | 56 | 22 | 18 | 3¼ | 12 | 16 | 28 | 5 | 22 | 2½ |
| 71 | Devji Jethabhai . . . | 30 | M | 69½ | 38 | 24 | 62 | 30 | 16 | 11½ | 26 | 22 | 48 | 30 | 26½ | 11¼ |
| 72 | Dalvantrai M. Pandya . . | 33 | M | 42 | 36 | 26 | 62 | 25 | 20 | 7 | 18 | 22 | 40 | 17 | 20 | 2 |
| 73 | Pragji Jetha . . . . | 22 | M | 74 | 30 | 26 | 56 | 26 | 18 | 5¾ | 30 | 22 | 52 | 29 | 18 | 6¼ |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74 | Gowardhan K. Patel . . . | 19 | M | 76 | 29 | 28 | 56 | 59 | 14 | 4½ | 32 | 28 | 60 | 53 | 58 | 2½ |
| 75 | Vimlabadan H. Patel . . . | 22 | M | 58 | 30 | 26 | 56 | 42 | 22 | 5¾ | 30 | 30 | 60 | 46 | 16 | 1¼ |
| 76 | Kantabadan H. Patel . . . | 28 | M | 73 | 28 | 28 | 56 | 29 | 20 | 4¼ | 31 | 29 | 60 | 50 | 20 | 11¼ |
| 77 | Rambadan Dudhabhai . . | 40 | M | 63 | 26 | 22 | 48 | 24 | 18 | 2¼ | 30 | 26 | 56 | 43 | 18 | 1¼ |
| 78 | Rudhabadan M. Prasad . . | 19 | M | 57 | 28 | 24 | 52 | 35 | 20 | 10 | 10 | 6 | 16 | 9½ | 20 | 19½ |
| 79 | Rambadan Motibhai . . . | 20 | M | 79 | 24 | 24 | 48 | 20 | 20 | 54½ | 29 | 31 | 60 | 52 | 20 | 13½ |
| 80 | Manibadan Dalabhai . . . | 17 | M | 74 | 20 | 16 | 36 | 20 | 20 | 2¼ | 35 | 25 | 60 | 52½ | 22 | 24¾ |
| 81 | Durgabadan A. Bhat . . . | 30 | M | 79 | 30 | 56 | 86 | 31½ | 22 | 1¾ | 28 | 24 | 52 | 49 | 16 | 7 |
| 82 | Savitabadan S. Patel . . . | 29 | M | 80 | 30 | 26 | 56 | 26 | 20 | ½ | 30 | 26 | 56 | 31 | 26 | 13¼ |
| 83 | Vimlabadan T. Patel . . . | 35 | M | 81 | 29 | 27 | 56 | 14 | 18 | ¾ | 32 | 28 | 60 | 69 | 16 | 2¼ |
| 84 | Shantabadan Patel . . . | 34 | M | 80 | 30 | 26 | 56 | 24 | 18 | 2¼ | 30 | 26 | 56 | 25½ | 16 | 1¼ |
| 85 | Shantilal C. Patel . . . | 18 | M | 81 | 29 | 27 | 56 | 6 | 20 | ¾ | 30 | 30 | 60 | 17 | 20 | 15¼ |
| | TOTAL . | | | | | | | | | | | | 8150. | 5135 | | |

**Name of Parishramalaya: Nadiad (Gujerat)**

**Date of starting: 19-1-56**

**No. of charkha sets : 40**

| S. No. | Name of Operative | Class of spinner | No. days of Trg. | From 10th March, 1956 to 27th March, 56 | | | | | | From 28th March to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | Age Sex | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding. | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Reginadevi Manisalal | 19 F | 75 | 50 | 38 | 88 | 35 | 18 | 6¼ | 50 | 58 | 108 | 73 | 20 | 86½ |
| 2 | Kirpaben Dahyabhai | 20 F | 48 | 56 | 48 | 104 | 35 | 18 | 24¼ | 35 | 46 | 81 | 37½ | 18 | 16 |
| 3 | Duliben Laljibhai | 37 F | 78½ | 62 | 50 | 112 | 80 | 20 | 24½ | 58 | 50 | 108 | 77 | 20 | 7½ |
| 4 | Mariyamben Vithalbhai | 30 F | 79 | 64 | 48 | 114 | 97 | 20 | 6 | 62 | 50 | 112 | 67 | 22 | 7 |
| 5 | Babuben Hiralal | 22 F | 80 | 62 | 50 | 112 | 87 | 20 | 3 | 60 | 120 | 120 | 66 | 22 | ½ |
| 6 | Maniben Danial | 25 F | 74½ | 30 | 26 | 56 | 26 | 20 | 6 | 65 | 55 | 120 | 79 | 18 | 9 |
| 7 | Gangaben Dhanjibhai | 28 F | 75½ | 62 | 50 | 112 | 64½ | 20 | 36½ | 52 | 56 | 108 | 78½ | 20 | 4 |
| 8 | Suniben Dalabhai | 25 F | 76 | 56 | 48 | 104 | 61½ | 20 | 11 | 52 | 68 | 120 | 86 | 22 | 5 |
| 9 | Dahiben Keshavlal | 25 F | 61½ | 50 | 46 | 96 | 41½ | 20 | 20 | 52 | 60 | 112 | 76 | 22 | 24 |
| 10 | Ashiben Danabhai | 18 F | 76 | 62 | 50 | 112 | 55 | 21 | 11¼ | 53 | 51 | 104 | 82½ | 21 | 4 |
| 11 | Shardaben Devjibhai | 30 F | 75½ | 60 | 52 | 112 | 58 | 16 | 2 | 64 | 56 | 120 | 104 | 20 | 17½ |
| 12 | Mariyamben Dasbhai | 35 F | 71½ | 58 | 54 | 112 | 74 | 20 | 2 | 57 | 63 | 120 | 93 | 22 | 16 |
| 13 | Vahaliben Umedbhai | 40 F | 71 | 60 | 52 | 112 | 32 | 14 | 3¼ | 57 | 36 | 93 | 103 | 19 | 40 |
| 14 | Amarben Savabhai | 19 F | 77½ | 61 | 51 | 112 | 60 | 18 | 3 | 60 | 60 | 120 | 127 | 22 | 4½ |
| 15 | Manikaben Hiralal | 26 F | 55 | 56 | 48 | 104 | 51 | 22 | 16¼ | 62 | 58 | 120 | 106 | 22 | 43 |
| 16 | Premhen Trikambhai | 37 F | 74 | 58 | 54 | 112 | 94 | 22 | 12 | 63 | 57 | 120 | 117 | 24 | 3½ |
| 17 | Kesharben Ramjibhai | 26 F | 75 | 68 | 44 | 112 | 46 | 18 | 19½ | 57 | 63 | 120 | 91 | 20 | 17 |
| 18 | Kashiben Bhalabhai | 49 F | 71 | 59 | 53 | 112 | 46 | 16 | 10 | 55 | 57 | 112 | 55 | 20 | 17 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Mayaben Somabhai . . . | 30 F | 80½ | 60 | 52 | 112 | 65 | 18 | ½ | 65 | 55 | 120 | 71½ | 20 | 1½ |
| 20 | Sharda ben Javerbhai . . . | 23 F | 78 | 58 | 54 | 112 | 58 | 20 | 7 | 54 | 62 | 116 | 88 | 20 | 2½ |
| 21 | Sudhaben Gordhanbhai . . | 21 F | 51 | 70 | 42 | 112 | 33 | 20 | 28 | 52 | 48 | 100 | 61 | 20 | 32½ |
| 22 | Sushiblaven Chandulal . . | 29 F | 70 | 60 | 52 | 112 | 78 | 18 | 3½ | 64 | 58 | 122 | 64 | 18 | 7½ |
| 23 | Bhadrabala Chandulal . . . | 19 F | 57 | 59 | 53 | 112 | 71 | 20 | 8½ | 60 | 60 | 120 | 113 | 18 | 14 |
| 24 | Maniben Ishwarbhai . . . | 19 F | 50 | 20 | 12 | 32 | 26 | 26 | 22½ | 56 | 40 | 96 | 37 | 26 | ½ |
| 25 | Gangaben Muljibhai . . . | 40 F | 73½ | 57 | 65 | 112 | 50 | 18 | 4 | 60 | 52 | 112 | 50 | 18 | 8 |
| 26 | Jethiben Kuberbhai . . . | 46 F | 69 | 65 | 57 | 112 | 32 | 18 | 1 | 52 | 60 | 112 | 32 | 16 | 1 |
| 27 | Jethiben Koyabhai . . . | 40 F | 68½ | 59 | 53 | 112 | 43 | 22 | 4 | 58 | 62 | 120 | 43 | 20 | 4 |
| 28 | Maniben Kantilal . . . | 23 F | 71½ | 58 | 50 | 108 | 43 | 20 | 4½ | 63 | 57 | 120 | 43 | 21 | 4½ |
| 29 | Rucethben Kadubhai . . . | 38 F | 56½ | 54 | 50 | 104 | 37 | 22 | 3 | 52 | 48 | 100 | 46 | 20 | 3½ |
| 30 | Manjulaben Dayabhai. . . | 18 F | 51½ | 57 | 55 | 112 | 45 | 22 | 27½ | 63 | 78 | 141 | 68 | 24 | 25½ |
| 31 | Shantaben Kantilal . . . | 33 F | 58½ | 60 | 52 | 112 | 81 | 20 | 9½ | 58 | 58 | 116 | 85 | 20 | 4½ |
| 32 | Hasmukhbai Maheschandr . | 21 F | 77 | 58 | 50 | 108 | 33 | 20 | 46½ | 56 | 60 | 116 | 20½ | 18 | .. |
| 33 | Indubhai Ambalal . . . | 35 M | 74 | 58 | 54 | 112 | 72 | 20 | 12½ | 53 | 55 | 108 | 78 | 22 | 4½ |
| 34 | Paulbhai Darshwabhai . . | 30 M | 89½ | 57 | 55 | 112 | 84 | 20 | 44 | 57 | 65 | 112 | 48 | 20 | 9½ |
| 35 | Ishwarbhai Kamabhai. .. . | 30 M | 77½ | 59 | 53 | 112 | 84 | 20 | 88 | 57 | 55 | 112 | 48 | 20 | 1 |
| 36 | Chimanlal . . . . . | 22 M | 76 | 60 | 52 | 112 | 76 | 20 | 8 | 35 | 45 | 80 | 36 | 18 | 11 |
| 37 | Muljibhai Laljibhai . . . | 35 M | 81 | 50 | 50 | 100 | 78 | 20 | 8 | 62 | 53 | 120 | 63 | 20 | 16 |
| 38 | Khodabhai Laljibhai . . . | 30 M | 8 | 62 | 52 | 114 | 48 | 18 | 2 | 56 | 60 | 116 | 73 | 20 | 1 |
| 39 | Ratilal Maganlal. . . . | 18 M | 71 | 58 | 50 | 108 | 81 | 20 | 9 | 60 | 60 | 120 | 70 | 22 | 2 |
| 40 | Rameshchandra Narsinbhai . | 22 M | 77 | 60 | 40 | 100 | 64 | 20 | 19 | 40 | 48 | 88 | 86 | 20 | 11 |
| 41 | Satendraprasad . . . . | 19 M | 75 | 55 | 58 | 113 | 47 | 17 | 80 | 66 | 50 | 116 | 71 | 20 | 9 |
| 42 | Purshottam Sankerlal . . . | 29 M | 78 | 55 | 45 | 100 | 60 | 17 | 6 | 70 | 50 | 120 | 91 | 22 | 8 |
| 43 | Ramanalal Pujalal . . . | 22 M | 77 | 50 | 50 | 100 | 106 | 18 | 5 | 52 | 80 | 132 | 27 | 20 | 3 |
| 44 | Keshavlal Manilal . . . | 28 M | 76 | 62 | 52 | 114 | 87 | 22 | 10 | 45 | 55 | 100 | 40 | 30 | 9 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Ratubhai Kalidas | 20 M | 76 | 65 | 48 | 113 | 22 | 22 | 10 | 52 | 60 | 112 | 53 | 22 | 5 |
| 46 | Atmaram Fulabhai | 18 M | 68 | 58 | 50 | 108 | 58 | 20 | 31 | 60 | 52 | 112 | 61 | 20 | 10 |
| 47 | Kalidas Sanabhai | 24 M | 78 | 58 | 50 | 108 | 58 | 20 | 16 | 65 | 55 | 120 | 79 | 30 | 5 |
| 48 | Narshibha Fulabhai | 28 M | 81 | 62 | 50 | 112 | 66 | 20 | 2 | 53 | 67 | 120 | 73 | 22 | 1 |
| 49 | Poputbhai Somabhai | 16 M | 66 | 61 | 51 | 112 | 73 | 20 | 9 | 61 | 55 | 116 | 100 | 28 | 18 |
| 50 | Pershottam Shivabhai | 21 M | 74 | 59 | 53 | 112 | 56 | 22 | 17 | 56 | 40 | 96 | 63 | 20 | 16 |
| 51 | Bhailal Vithalbhai | 22 M | 79 | 48 | 46 | 94 | 67 | 20 | 6 | 65 | 55 | 120 | 75 | 22 | 8 |
| 52 | Haribhai Ambalal | 20 M | 76 | 62 | 50 | 112 | 67 | 20 | 19 | 48 | 40 | 88 | 50 | 20 | 8 |
| 53 | Kanubhai Girdharbhai | 21 M | 78 | 62 | 50 | 112 | 65 | 21 | 20 | 67 | 53 | 120 | 59 | 20 | 1 |
| 54 | Rameshchandra Pujalal | 25 M | 80 | 61 | 51 | 112 | 58 | 20 | 7 | 50 | 62 | 112 | 46 | 20 | 3 |
| 55 | Nagunbhai Hathibhai | 55 M | 80 | 70 | 42 | 112 | 16 | 20 | 6 | 65 | 55 | 120 | 30 | 18 | 1 |
| 56 | Chhaganbhai Sankerbhai | 50 M | 77 | 62 | 50 | 112 | 57 | 18 | 18 | 57 | 63 | 120 | 100 | 20 | 13 |
| 57 | Fulabhai Hiralal. | 18 M | 76 | 60 | 40 | 100 | 40 | 21 | 8 | 65 | 55 | 120 | 89 | 20 | 29 |
| 58 | Jayantiala Hanilal | 22 M | 78 | 62 | 50 | 112 | 19 | 18 | 44 | 62 | 50 | 112 | 51 | 18 | 1 |
| 59 | Bachubhai Manekalal | 17 M | 78 | 62 | 50 | 112 | 81 | 20 | 1 | 64 | 48 | 112 | 83 | 20 | 16 |
| 60 | Manubhai Ishwarbhai | 18 M | 74 | 60 | 52 | 112 | 89 | 16 | 3 | 50 | 40 | 90 | 48 | 16 | 2 |
| 61 | Manialal Morarbhai | 35 M | 71 | 58 | 50 | 108 | 52 | 22 | 39 | 55 | 57 | 112 | 76 | 22 | 24 |
| 62 | Ramubhai Dhulabhai | 19 M | 77 | 61 | 51 | 112 | 26 | 20 | 43 | 57 | 55 | 112 | 47 | 20 | 20 |
| 63 | Arvindbhai Ishwarbhai | 20 M | 48 | 58 | 52 | 110 | 44 | 14 | 20 | 60 | 60 | 120 | 42 | 20 | 51 |
| 64 | Motibhai Daudbhai | 21 M | 70 | 62½ | 50 | 112½ | 65 | 20 | 12 | 42 | 30 | 72 | 50 | 18 | 6 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 7159 | 4347 |  |  |

Date of starting: 3-1-56

Name of Parishramalaya : Kunja, Dt. Mehsana (Gujerat)

No. of Ambar charkha sets: 33

| No. | Name of Operative | Class of Spinner | No. of days of Trg. | From 20th March, 56 to 27th March, 56 | | | | | | From 28th March to 13 1h April, 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | Age-Sex | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Imam Khand Ahmed Khan. | 20 M | 33 | | | | | | | | | | | | |
| 2 | Ramubhai Dungerbhai | 32 M | 71 | 40 | 30 | 70 | 35 | 18 | 25 | 47 | 43 | 90 | 28 | 22 | 15 |
| 3 | Sashibhan Kantibahan | 34 M | 25 | | | | | | | | | | | | |
| 4 | Tarabahan Dev Chand | 20 M | 50 | 8 | 4 | 12 | 8 | 20 | 5 | 22 | 38 | 60 | | | |
| 5 | Mangubahan Shivabhai | 14 M | 62 | 15 | 6 | 21 | 8 | 16 | 8 | 22 | 38 | 80 | 14 | 16 | 5 |
| 6 | Ramji Bhai Nakesibhai | 30 M | 69 | 30 | 40 | 70 | 67 | 24 | 35 | 55 | 45 | 100 | 69 | 24 | 40 |
| 7 | Baudinbhai Jhadubhai | 45 M | 15 | | | | | | | | | | | | |
| 8 | Ushman Khand Nathekhan | 22 M | 47 | 21 | 15 | 36 | 13 | 16 | 5 | 12 | | 20 | 5 | 16 | .. |
| 9 | Shilabahan Kashiram . | 18 M | 36 | 20 | 10 | 30 | 18 | 16 | 12 | 12 | 8 | 20 | 7 | 16 | 2 |
| 10 | Chandbhan Kashiram | 24 M | 49 | 10 | 15 | 25 | 14 | 16 | 9 | | | | 2 | | |
| 11 | Ushmakhan Jehedekhan | 24 M | 60 | 5 | 10 | 15 | 6 | 36 | 2 | | | | 2 | | 9 |
| 12 | Jiwajkhan Badalkhan | 20 M | 49 | 20 | 10 | 30 | 9 | 16 | 6 | 12 | 8 | 20 | 4 | 18 | 9 |
| 13 | Marium Ahmed Mansari | 24 M | 76 | 40 | 30 | 70 | 19 | 20 | 10 | 50 | 35 | 65 | 19 | 24 | 4 |
| 14 | Sanlokbhan Marangji . | 14 M | 78 | 30 | 40 | 70 | 36 | 20 | 10 | 45 | 55 | 100 | 19 | 22 | 10 |
| 15 | Hirabai Bihalbhai | 14 M | 68 | 20 | 30 | 50 | 27 | 20 | 10 | 40 | 30 | 70 | 20 | 22 | 10 |
| 16 | Sashi Bhai J. | 20 M | 66 | 30 | 25 | 55 | 21 | 20 | 15 | 5 | 65 | 100 | 27 | 24 | 10 |
| 17 | Hirabahan Rai Chand | 24 M | 15 | | | | | | | | | | | | 15 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Usmankhan Dorekhan . . | 20 M | 72 | 40 | 30 | 70 | 35 | 18 | 21 | 53 | 37 | 90 | 33 | 24 | 20 |
| 19 | Jivibhan Ganeshbhai . . . | 26 M | 60 | | | | | | | | | | | | |
| 20 | Ghirderbgai Lachman B. . . | 45 M | 20 | 5 | 6 | 11 | 4 | 16 | | 16 | 14 | 30 | 19 | 17 | |
| 21 | Datibhan Shiv Ram . . . | 24 M | 10 | | | | | | | | | | | | |
| 22 | Sukhdevji Shiveger . . . | 32 M | 74 | 40 | 30 | 70 | 55 | 18 | 17 | 47 | 43 | 90 | 40 | 20 | 20 |
| 23 | Jethibahan Jhiveram . . . | 14 M | 69 | 15 | 15 | 30 | 20 | 28 | 13 | 4 | 2 | 6 | 4 | 15 | 2 |
| 24 | Manikbahan Sakji . . . | 24 M | 16 | | | | | | | | | | | | |
| 25 | Pherubahai Jirabai . . . | 36 M | 66 | 10 | 15 | 25 | 11 | 16 | 12 | 16 | 10 | 26 | 5 | 12 | 2 |
| 26 | Kashibahan Khemchand . . | 20 M | 17 | | | | | | | | | | | | |
| 27 | Shardabahan Ravishanker . . | 28 M | 17 | | | | | | | | | | | | |
| 28 | Manorama Ravishanker . . | 22 M | 55 | 12 | 15 | 27 | 37 | 20 | 24 | 27 | 13 | 40 | 14 | 14 | 10 |
| 29 | Shardabahan Babrudas . . | 24 M | 58 | 20 | 15 | 35 | 11 | 16 | 5 | | | | | | |
| 30 | Khembhai Pitamber . . . | 20 M | 30 | | | | | | | | | | | | |
| 31 | Bababhai Phalabhai . . . | 14 M | 24 | | | | | | | | | | | | |
| 32 | Shambahan Motibai . . . | 20 M | 70 | 15 | 16 | 31 | 20 | 18 | 11 | 17 | 23 | 40 | 14 | 18 | 8 |
| 33 | Revababan Moolachand . . | 22 M | 70 | 20 | 20 | 40 | 23 | 16 | 16 | 24 | 16 | 40 | 20 | 20 | 10 |
| 34 | Eantsbahan Basiklal . . . | 18 M | 19 | | | | | | | | | | | | |
| 35 | Lachmibahan Ram Kushan . . | 20 M | 11 | | | | | | | | | | | | |
| 36 | Sulachanda Thenji . . . | 18 F | 9 | | | | | | | | | | | | |
| 37 | Mahender Kr. Shivashanker . | 25 M | 6 | | | | | | | | | | | | |
| 38 | Purshotamdas . . . . | 40 M | 60 | 10 | 20 | 30 | 16 | 28 | 12 | 16 | 10 | 26 | 8 | 22 | 5 |
| 39 | Shankerbai Gulabdas . . . | 25 M | 11 | | | | | | | | | | | | |
| 40 | Ajimkhan Ashimkhan . . | 15 M | 17 | | | | | | | | | | | | |
| 41 | As alkhan Mshaphkhan . . | 15 M | 12 | | | | | | | | | | | | |
| 42 | Dhemerbahi Hirabhai . . | 20 M | 12 | | | | | | | | | | | | |
| 43 | Delrungbhai Umedbhai . . | 16 M | 12 | | | | | | | | | | | | |
| 44 | Nilabhahan Dempresh . . | 22 M | 20 | | | | | | | | | | | | |

| | 2 | 3 | 4 | 5 | | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Baghaji Dulaji | 16 M | 16 | | | | | | | | | | | | |
| 46 | Javangher Aemadhur | 15 M | 18 | | | | | | | | | | | | |
| 47 | Punaji Kacheraji | 28 M | 9 | | | | | | | | | | | | |
| 48 | Ganishbahai Joinaram | 30 M | | | | | | | | | | | | | |
| 49 | Khobahan Shivram | 20 M | | | | | | | | | | | | | |
| 50 | Punaji Marungij | 30 M | 9 | | | | | | | | | | | | |
| 51 | Motibehai Devabahai | 10 M | 21 | | | | | | | | | | | | |
| 52 | Norbhangbahai Gokur | 16 M | 58 | 30 | 40 | 70 | 31 | 20 | 15 | 40 | 45 | 85 | 30 | 20 | 15 |
| 53 | Khobahan Pitember | 16 M | 36 | | | | | | | | | | | | |
| 54 | Marbhangbhai Shamalbhai | 20 M | 61 | 35 | 30 | 65 | 21 | 20 | 13 | 40 | 25 | 65 | 16 | 16 | 11 |
| 55 | Azambu Daryavkhan | 30 M | 48 | 40 | 30 | 70 | 50 | 20 | 35 | 53 | 47 | 100 | 35 | 20 | 25 |
| 56 | Darbibi Tehdinkhan | 13 M | 60 | 30 | 20 | 50 | 29 | 30 | 20 | 48 | 80 | 80 | 32 | 22 | 0 |
| 57 | Nurubibi Janumian | 30 M | 52 | 35 | 45 | 80 | 52 | 24 | 25 | 47 | 43 | 90 | 38 | 26 | 15 |
| 58 | Nurubibi Janumian | 14 F | 60 | 30 | 25 | 55 | 12 | 20 | 8 | 40 | 30 | 70 | 25 | 18 | 15 |
| 59 | Surbibi Naherbkhan | 14 F | 61 | 40 | 35 | 75 | 37 | 20 | 30 | 40 | 45 | 85 | 42 | 16 | 40 |
| 60 | Dashbhahan | 14 M | 57 | 35 | 30 | 65 | 30 | 20 | 30 | 35 | 30 | 65 | 9 | 16 | 10 |
| 61 | Nurbhahan Jivgarva | 12 M | 62 | 30 | 30 | 60 | 27 | 22 | 21 | 55 | 27 | 80 | 32 | 18 | 23 |
| 62 | Phejubahan Rajbankhan | 14 M | 62 | 30 | 35 | 55 | 33 | 24 | 20 | 58 | 22 | 80 | 36 | 18 | 25 |
| 63 | Imambu Hamimkhan | 30 M | 47 | 20 | 15 | 35 | 9 | 12 | 6 | 12 | 8 | 20 | 6 | 20 | 4 |
| 64 | Dadubahan Salimkhan | 18 M | 62 | 30 | 40 | 70 | 16 | 32 | 10 | 45 | 37 | 82 | 18 | 28 | 9 |
| 65 | Gudbahan Moderkhan | 16 M | 49 | 23 | 30 | 53 | 13 | 36 | 8 | 35 | 45 | 80 | 27 | 18 | 10 |
| 66 | Sabinabahan Mohd. Khan | 14 M | 61 | 35 | 25 | 60 | 13 | 20 | 10 | 37 | 43 | 70 | 10 | 14 | 4 |
| 67 | Umraobahan Dilaverkhan | 36 M | 56 | 40 | 30 | 70 | 29 | 22 | 14 | 53 | 30 | 65 | 77 | 24 | 8 |
| 68 | Zinetbahan Mukhtiarkhan | 30 M | 54 | 30 | 35 | 65 | 12 | 22 | 12 | 30 | 25 | 55 | 14 | 22 | 8 |
| 69 | Gurubai Phetekhan | 40 M | 61 | 35 | 25 | 60 | 11 | 26 | 10 | 43 | 33 | 80 | 17 | 28 | 8 |
| 70 | Jivenbehan Jamillkan | 40 M | 56 | 33 | 37 | 70 | 20 | 20 | 10 | 40 | 25 | 65 | 18 | 20 | 9 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | Shahubahan Jivegkhan . . | 35 M | 27 | | | | | | | | | | | | |
| 72 | Shahubahan Hashinkhan . . | 15 M | 57 | 37 | 23 | 60 | 9 | 12 | 6 | 48 | 32 | 80 | 11 | 20 | 7 |
| 73 | Umraobahan Saidkhan . . | 40 M | 57 | 35 | 40 | 75 | 32 | 22 | 24 | 58 | 22 | 80 | 36 | 17 | 25 |
| 74 | Chotabahan Hussainkhan . . | 36 M | 24 | 5 | 10 | 15 | 3 | 12 | 1 | | | | | | |
| 75 | Jhorubahan Mushafkhan . . | 20 M | 56 | 33 | 27 | 60 | 17 | 20 | 9 | 45 | 55 | 100 | 20 | 16 | 11 |
| 76 | Arbun Phetekhan . . . | 40 M | 57 | 45 | 25 | 70 | 19 | 20 | 10 | 40 | 45 | 85 | 25 | 18 | 15 |
| 77 | Jadabahan Irahimkhan . . | 36 M | 41 | 35 | 45 | 80 | 36 | 16 | 20 | 53 | 20 | 73 | 23 | 16 | 15 |
| 78 | Merubehan Shemsherikhan . . | 16 M | 36 | 30 | 25 | 55 | 23 | 20 | 10 | 45 | 38 | 83 | 25 | 24 | 11 |
| 79 | Nashibbahan Miankhan . . | 20 M | 20 | 23 | 17 | 40 | 9 | 20 | 5 | 43 | 37 | 80 | 12 | 22 | 7 |
| 80 | Ainabahan Kashamkhan . . | 20 M | 17 | | | | | | | | | | 5 | | 2 |
| 81 | Sayabbahan Sabudin . . . | 30 M | 45 | | | | | | | | | | | | |
| 82 | Chundbahan Shamrukhan . . | 18 M | 45 | 35 | 20 | 55 | 7 | 16 | 4 | 37 | 43 | 80 | 19 | 18 | 6 |
| 83 | Jainabahan Nehrukhan . . . | 14 M | 40 | 24 | 28 | 52 | 13 | 18 | 7 | 30 | 20 | 50 | 9 | 16 | 5 |
| 84 | Chelkhan Sharmarankhan . . | 16 M | 44 | 13 | 17 | 30 | 10 | 20 | 6 | 23 | 11 | 34 | 10 | 16 | 6 |
| 85 | Kusubahan Maghavlal . . | 16 M | 38 | 50 | 40 | 90 | 13 | 12 | 9 | 35 | 35 | 70 | 10 | 16 | 7 |
| 86 | Shantabahan Motiram . . | 20 M | 17 | 10 | 9 | 19 | 6 | 14 | 4 | | | | | | |
| 87 | Phakir Ahmed . . . . . | 14 M | 35 | 16 | 20 | 36 | 16 | 20 | 18 | 45 | 55 | 100 | 9 | 20 | 9 |
| 88 | Nathi Bahan . . . . . | 35 M | 35 | 24 | 26 | 50 | 12 | 16 | 8 | 24 | 20 | 44 | 9 | 12 | 4 |
| 89 | Kher Bibi . . . . . | 45 M | 9 | 7 | 6 | 13 | 3 | 20 | 1 | | | | | | |
| 90 | Nashib Bahan . . . . . | 30 M | 31 | 8 | 20 | 28 | 10 | 18 | 8 | 25 | 35 | 60 | 9 | 16 | 8 |
| 91 | Shantabahan Mithundas . . | 20 M | 57 | 20 | 19 | 39 | 13 | 14 | 9 | 15 | 20 | 35 | 11 | 20 | |
| 92 | Nathubaichethabahai . . . | 20 M | 35 | 20 | 19 | 39 | 30 | 14 | 20 | 21 | 19 | 40 | 40 | 18 | 28 |
| 93 | Arbu Nasir Khan . . . | 40 M | 20 | 30 | 29 | 59 | 8 | 16 | 2 | 40 | 45 | 85 | 24 | 22 | 8 |
| | TOTAL . | | | | | | | | | | | 3338 | 1220 | | |

Date of starting: 20-1-56

Name of Parishramalaya : MEERUT (U.P.).

Number of Charkha sets : 20.

| Serial No. | Name of operative | Class of Spinner |  | No. of days of Trg. | From 10th March 56 to 27th March 56 |  |  |  |  |  | From 28th March to 13th April, 1956. |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  | Age | Sex |  | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Inidhalalji | 20 | M | 62 | 36 | 36 | 72 | 135 | 18 | 60 | 45 | 45 | 90 | 111 | 18 | 39 |
| 2 | Chaniram | 20 | M | 72 | 45 | 45 | 90 | 114 | 16 | 100 | 45 | 45 | 90 | 92 | 12 | 40 |
| 3 | Vanvari Bunva | 20 | M | 68 | 45 | 45 | 90 | 98 | 14 | 60 | 33 | 33 | 66 | 70 | 16 | 36 |
| 4 | Omprakash Kav | 21 | M | 54 | 45 | 45 | 90 | 134 | 14 | 25 | 83 | 72 | 49 | 49½ | 14 | 23 |
| 5 | Rameshchandrabhai | 23 | M | 54 | 45 | 45 | 90 | 159 | 16 | 60 | 35 | 28 | 72 | 107 | 16 | 38 |
| 6 | Hirasinh | 21 | M | 69 | 45 | 45 | 90 | 98 | 16 | 80 | 36 | 36 | 72 | 44 | 18 | 20 |
| 7 | Dalichand | 32 | M | 66 | 45 | 45 | 90 | 67 | 14 | 50 | 33 | 33 | 66 | 83 | 20 | 30 |
| 8 | Radheshyam | 20 | M | 55 | 39 | 39 | 78 | 102 | 16 | 60 | 33 | 33 | 66 | 62 | 16 | 36 |
| 9 | Anandi Vallabh | 21 | M | 54 | 45 | 45 | 90 | 80 | 58 | 40 | 36 | 36 | 72 | 72 | 14 | 36 |
| 10 | Dharmpal Sharma | 18 | M | 52 | 42 | 42 | 84 | 106 | 16 | 50 | 45 | 45 | 90 | 116 | 18 | 40 |
| 11 | Kashichandra | 20 | M | 56 | 39 | 39 | 78 | 76 | 20 | 40 | 45 | 45 | 90 | 84 | 12 | 20 |
| 12 | Khumansinh | 20 | M | 53 | 36 | 36 | 72 | 63 | 16 | 50 | 39 | 39 | 78 | 116 | 14 | 40 |
| 13 | Laxmanda | 20 | M | 53 | 42 | 42 | 84 | 92 | 12 | 56 | 33 | 33 | 66 | 83½ | 16 | 24 |
| 14 | Abdulhabib | 20 | M | 45 | 39 | 39 | 78 | 61 | 16 | 40 | 45 | 45 | 90 | 149¾ | 20 | 40 |
| 15 | Shivajisinh | 22 | M | 53 | 45 | 45 | 90 | 105 | 14 | 60 | 33 | 33 | 66 | 72 | 16 | 29 |

| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Omprakash Sharma | 20 | M | 75 | 39 | 39 | 78 | 78 | 18 | 40 | 33 | 33 | 66 | 78 | 14 | 20 |
| 17 | Shivcharandas | 20 | M | 58 | 45 | 45 | 90 | 70 | 12 | 50 | 42 | 42 | 84 | 113 | 12 | 50 |
| 18 | Ramnath | 21 | M | 69 | 45 | 45 | 90 | 72 | 16 | 30 | 45 | 45 | 90 | 89 | 14 | 20 |
| 19 | Bhurchandra | 32 | M | 71 | 45 | 45 | 90 | 95 | 18 | 40 | 42 | 42 | 84 | 66 | 16 | 20 |
| 20 | Gangaprasad | 21 | M | 48 | 45 | 45 | 90 | 95 | 18 | 42 | 45 | 45 | 90 | 104 | 12 | 28 |
| 21 | Kamalasinh | 20 | M | 58 | 39 | 39 | 78 | 73 | 16 | 44 | 45 | 45 | 90 | 89 | 14 | 24 |
| 22 | Balvirsinh | 20 | M | 58 | 45 | 45 | 90 | 78 | 18 | 40 | 42 | 42 | 84 | 87 | 18 | 32 |
| 23 | Dhidhashah | 20 | M | 54 | 36 | 36 | 72 | 48 | 14 | 29 | 45 | 45 | 90 | 86 | 14 | 36 |
| 24 | Sureshchandra | 21 | M | 54 | 42 | 42 | 84 | 60 | 14 | 30 | 45 | 45 | 90 | 120 | 20 | 32 |
| 25 | Jahirahmed | 20 | M | 48 | 42 | 42 | 84 | 74 | 16 | 36 | 37 | 37 | 54 | 56½ | 18 | 16 |
| 26 | Radheshyam Gaud | 23 | M | 49 | 42 | 42 | 84 | 14 | 12 | 4 | 24 | 24 | 48 | 8 | 14 | 2 |
| 27 | Jitendralal | 22 | M | 63 | 42 | 42 | 84 | 79 | 14 | 20 | 36 | 36 | 72 | 41 | 16 | 8 |
| 28 | Tejpalsinh | 21 | M | 58 | 36 | 36 | 72 | 52 | 14 | 20 | 45 | 45 | 90 | 40 | 18 | 8 |
| 29 | Jaiprakash | 20 | M | 50 | 48 | 45 | 93 | 40 | 10 | 20 | 21 | 21 | 42 | 19 | 20 | 3 |
| 30 | Khulhipaman | 20 | M | 52 | 33 | 33 | 66 | 51 | 16 | 24 | 39 | 39 | 78 | 96 | 16 | 34 |
| 31 | Kalicharan | 24 | M | 67 | 45 | 45 | 90 | 55 | 14 | 30 | 33 | 33 | 66 | 41 | 16 | 15 |
| 32 | Shahishchandraji | 20 | M | 55 | 30 | 30 | 60 | 40 | 14 | 24 | 26 | 26 | 52 | 36 | 14 | 13 |
| 33 | Janaradanji | 28 | M | 69 | 20 | 20 | 40 | 23 | 18 | 28 | 23 | 23 | 46 | 72 | 18 | 26 |
| 34 | Satyaprakash | 20 | M | 27 | 18 | 18 | 36 | 17 | 12 | 28 | 22 | 22 | 44 | 11 | 14 | 5 |
| 35 | Rajakishan | 15 | M | 57 | 23 | 23 | 46 | 38 | 12 | 28 | 23 | 23 | 46 | 36 | 12 | 14 |
| 36 | Lakshmidevi | 20 | F | 72 | 22 | 22 | 44 | 47 | 18 | 30 | 22 | 22 | 44 | 64 | 18 | 20 |
| 37 | Vidyavati | 23 | F | 71 | 21 | 21 | 42 | 58 | 16 | 26 | 23 | 23 | 46 | 84 | 14 | 28 |
| 38 | Laxmidevi | 22 | F | 72 | 23 | 23 | 46 | 49 | 18 | 28 | 22 | 22 | 44 | 45 | 18 | 20 |
| 39 | Prakashjati | 24 | M | 65 | 15 | 18 | 36 | 40 | 18 | 24 | 23 | 23 | 46 | 49 | 16 | 24 |
| 40 | Savitri | 29 | F | 70 | 22 | 22 | 44 | 39 | 12 | 28 | 23 | 23 | 46 | 59 | 12 | 23 |
| 41 | Urmilla | 22 | F | 72 | 23 | 23 | 46 | 44 | 16 | 30 | 22 | 22 | 44 | 66 | 16 | 24 |

| | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42 | Kalavati | 25 | F | 72 | 22 | 22 | 44 | 42 | 14 | 28 | 23 | 23 | 46 | 55 | 14 | 22 |
| 43 | Harpyari | 24 | F | 72 | 23 | 23 | 46 | 30 | 14 | 20 | 22 | 22 | 44 | 70 | 14 | 24 |
| 44 | Kalavati | 25 | F | 61 | 18 | 18 | 36 | 28 | 12 | 20 | 23 | 23 | 46 | 26 | 10 | 11 |
| 45 | Premkali | 23 | F | 55 | 18 | 18 | 36 | 22 | 14 | 20 | 22 | 22 | 44 | 23 | 12 | 10 |
| 46 | Chammeli | 24 | F | 70 | 23 | 23 | 46 | 33 | 14 | 20 | 23 | 23 | 46 | 46 | 14 | 20 |
| 47 | Kailasvati | 23 | F | 69 | 20 | 20 | 40 | 27 | 12 | 20 | 22 | 22 | 44 | 47 | 10 | 21 |
| 48 | Sunandadevi | 24 | F | 72 | 22 | 22 | 44 | 36 | 14 | 24 | 22 | 22 | 44 | 41 | 14 | 13 |
| | TOTAL | | | | | | | | | | | | 3124 | 3377 | | |

Name of Parishramalaya : MEERUT (U.P.) (27)

Date of Starting : 20-1-56
Number of Charkha sets : 20.

| Serial No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 26th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age-Sex | | | | | | | | | | | | | |
| 1 | Ramasharanbhai . . . | 20 M | 69 | 56 | 51½ | 107½ | 73 | 149 | 12½ | 55 | 56½ | 111½ | 13½ | 14 | 19 |
| 2 | Ramashankerbhai . . . | 18 M | 77½ | 54½ | 49 | 103½ | 91 | 162 | 15 | 54 | 56½ | 110½ | 89 | 14 | 14 |
| 3 | Caburambhai . . . . | 23 M | 76½ | 47 | 44 | 91 | 50½ | 149 | 15 | 52¼ | 49 | 101 ¾ | 73 | 14 | 14 |
| 4 | Chandrasenbhai . . . | 15 M | 79 | 47¾ | 48 | 95¾ | 85 | 149 | 15 | 52½ | 53 | 105¾ | 16¼ | 12 | 20 |
| 5 | Umashanker 1 . . . . | 23 M | 80 | 52 | 51 | 103 ½ | 83 | 149 | 15 | 54 | 53½ | 107½ | 93 | 14 | 17½ |
| 6 | Umashanker No. 2 . . . | 21 M | 80 | 54½ | 49 | 103½ | 90 | 162 | 15 | 54 | 56½ | 110½ | 80 | 14 | 16 |
| 7 | Rampal Singh . . . . | 21 M | 79½ | 55 | 53½ | 108½ | 72 | 123 | 15 | 55½ | 55 | 110½ | 80 | 12 | 17½ |
| 8 | Babusingh Bhai . . . | 20 M | 79½ | 49 | 40 | 89 | 89 | 149 | 17 | 51½ | 53½ | 94 | 88 | 14 | 16 |
| 9 | Navia Singh . . . . | 21 M | 74 | 57 | 54 | 111 | 93 | 149 | 17½ | 56 | 56 | 112 | 88 | 12 | 18 |
| 10 | Ratansinh . . . . | 20 M | 72½ | 51 | 50 | 101 | 67 | 149 | 17½ | 51 | 45 | 96 | 63 | 10 | 16 |
| 11 | Jahansinh . . . . . | 21 M | 79½ | 54½ | 50½ | 100¾ | 101 | 162 | 16 | 56½ | 51½ | 108 | 98 | 12 | 21 |
| 12 | Ramadhir . . . . . | 20 M | 80 | 66½ | 50½ | 107 | 80 | 162 | 16 | 57 | 54 | 111 | 30 | 14 | 18 |
| 13 | Pritamsinh . . . . | 20 M | 80 | 56 | 56¾ | 112¾ | 127½ | 142 | 26 | 55 | 56½ | 111¼ | 102 | 12 | 24 |
| 14 | Rajvir . . . . . | 21 M | 78 | 55¾ | 57¾ | 113½ | 61 | 14 | 19 | 57½ | 51¼ | 108¼ | 72 | 14 | 18 |
| 15 | Kishorilal . . . . . | 20 M | 79½ | 66 | 56¾ | 112¾ | 127½ | 149 | 16 | 52 | 52½ | 104½ | 102 | 12 | 24 |
| 16 | Jagvash . . . . . | 24 M | 78 | 49 | 48½ | 97½ | 62 | 161 | 14 | 55¾ | 51 | 106¼ | 84 | 16 | 18 |
| 17 | Baijnath . . . . . | 22 M | 79½ | 41 | 46 | 87 | 82 | 162 | 17 | 37½ | 48½ | 86 | 84½ | 16 | 18 |
| 18 | Swadeshkumar . . . . | 18 M | 80 | 50¼ | 53 | 103¼ | 75 | 149 | 15 | 54½ | 54 | 108½ | 77 | 14 | 15 |
| 19 | Omprakash . . . . | 18 M | 80 | 54¼ | 53¾ | 108¼ | 72¼ | 14 | 14 | 51½ | 48 | 99½ | 66 | 14 | 13 ½ |
| 20 | Prayagdatt . . . . | 21 M | 80 | 48½ | 54¾ | 103¼ | 96 | 14 | 20 | 48¾ | 49¾ | 98½ | 63 | 12 | 15 |
| 21 | Sukharamsinh . . . . | 22 M | 77½ | 56¼ | 50 | 109¼ | 100½ | 162 | 17 | 55 | 36 | 91 | 85 | 14 | 15½ |
| 22 | Kaushnumanand . . . | 26 M | 80 | 51¼ | 54 | 103¼ | 96 | 162 | 15 | 42¾ | 44¾ | 87 | 63 | 12 | 14 |

6 M of Production.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | Premdutt | 22 | M | 77½ | 54½ | 59¾ | 114 | 59½ | 164 | 10 | 45 | 44 | 89 | 42½ | 16 | 9 |
| 24 | Kamalgiri | 19 | M | 74½ | 48½ | 52¾ | 101¾ | 80 | 121 | 17 | 46 | 50½ | 96½ | 81 | 14 | 15 |
| 25 | Data M. | 19 | M | 72½ | 55½ | 53½ | 109 | 75 | 141 | 15 | 50 | 48½ | 98½ | 85 | 14 | 16 |
| 26 | Budhprakash | 20 | M | 72 | 54 | 48½ | 102½ | 75 | 148 | 16 | 47 | 49½ | 96½ | 77 | 14 | 15 |
| 27 | Tejpal | 19 | M | 73 | 51 | 55½ | 106½ | 75½ | 124 | 17 | 54¾ | 54¾ | 109½ | 71½ | 14 | 14 |
| 28 | Gnanchand | 18 | M | 73 | 42 | 51 | 93 | 98 | 149 | 20 | 45 | 46½ | 91½ | 86 | 14 | 16 |
| 29 | Duttkishan | 19 | M | 73½ | 52½ | 52¾ | 105½ | 96 | 149 | 17½ | 48½ | 49¾ | 97¾ | 85¾ | 14 | 15 |
| 30 | Jagdishprasadbhai | 24 | M | 70 | 48¼ | 49 | 97¼ | 71 | 14 | 13 | 49 | 49½ | 98½ | 86 | 14 | 115 |
| 31 | Hatimsinh | 20 | M | 70 | 41 | 48½ | 89½ | 75 | 14 | 15 | 43½ | 43 | 86½ | 65 | 14 | 13 |
| 32 | Shivdutt | 22 | M | 69½ | 54½ | 49½ | 104 | 69 | 12 | 14 | 58 | 44¾ | 102¾ | 81 | 14 | 17 |
| 33 | Attarsinh | 27 | M | 69 | 52½ | 49¼ | 101½ | 80¼ | 14 | 15 | 51 | 52¼ | 103¼ | 80 | 14 | 17¾ |
| 34 | Ramprasad | 23 | M | 68½ | 46½ | 53 | 99½ | 75 | 14 | 14 | 55 | 55 | 110 | 71 | 14 | 18 |
| 35 | Jaypal | 20 | M | 68 | 52½ | 53½ | 106 | 86 | 14 | 17 | 54½ | 51½ | 102 | 89 | 14 | 19 |
| 36 | Raghuvar Dayal | 19 | M | 69 | 49½ | 48¾ | 98½ | 80 | 14 | 16 | 49½ | 45¾ | 95 | 80 | 14 | 15 |
| 37 | Jaykansinh | 18 | M | 65 | 44 | 54 | 98 | 49 | 12 | 14 | 46 | 55¼ | 10¼ | 86 | 12 | 20 |
| 38 | Tulayan | 18 | M | 58 | 56½ | 59 | 115½ | 66 | 12 | 13 | 57½ | 57½ | 115½ | 67 | 14 | 13 |
| 39 | Lalsinh | 19 | M | 57½ | 39 | 57 | 116 | 68 | 12 | 15 | 58½ | 57 | 115½ | 67 | 14 | 13 |
| 40 | Shivkumar | 22 | M | 49½ | 43½ | 45½ | 89 | 36 | 14 | 9 | 38½ | 50¾ | 99¾ | 47 | 12 | 10 |
| 41 | Laxmichandra | 19 | M | 45 | 57½ | 48½ | 106 | 35½ | 12 | 10 | 61 | 34 | 95 | 44 | 12 | 11 |
| 42 | Ram Kishan | 21 | M | 32 | 50 | 33 | 83 | 33 | 12 | 8 | 61 | 34 | 95 | 44 | 12 | 9 |
| 43 | Javantiben | 20 | F | 75 | 48 | 59 | 107 | 59 | 16 | 13 | 50 | 60 | 110 | 52 | 14 | 13 |
| 44 | Kamalben | 30 | F | 68 | 51 | 49½ | 100½ | 46 | 20 | 6 | 48 | 49 | 97 | 41 | 18 | 9 |
| 45 | Sahailaben | 22 | F | 69½ | 35 | 52¾ | 96¾ | 44 | 16 | 7 | 52 | 58 | 110 | 51 | 16 | 10 |
| 46 | Kumari Shilaben | 18 | F | 58 | 48 | 50 | 98 | 46 | 16 | 9 | 60 | 55 | 115 | 55 | 16 | 9 |
| 47 | Jayantiban | 30 | F | 53 | 27 | 33¾ | 60¾ | 34 | 16 | 8 | 40 | 38 | 78 | 40 | 14 | 8 |
| 48 | Kaushalben | 34 | F | 57 | 36 | 60 | 96 | 51 | 16 | 7 | 38 | 52½ | 90½ | 40 | 14 | 9 |
| 49 | Uttamiben | 33 | F | 41 | 35 | 30 | 65 | 28 | 14 | 6 | 52 | 50 | 102 | 55¾ | 12 | 13 |
| 50 | Ramkali | 35 | F | 41 | 46 | 40 | 86 | 38 | 12 | 9 | 54 | 49 | 103 | 43 | 16 | 10 |
| | TOTAL | | | | | | | | | | | | 5092 | 3648 | | |

Name of Parishramalaya : Date of Starting 20-1-56. Number of Charkha sets : 20

Ambar Parkashan : Dratiani (U.P.)

| Serial No. | Name of operative | Class of Spinner | | No. of days of trg. | From 10th March, 56 to 27th March 56 | | | | | | From 28th March to 13th April 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Jagdish Jalamsing | 26 | M | 66 | 49 | 51 | 100 | 92 | 18 | 40 | 54 | 46 | 100 | 71 | 18 | 22 |
| 2 | Muendrasinh | 21 | M | 70 | 53 | 54 | 107 | 75 | 16 | 30 | 52 | 52 | 104 | 66 | 18 | 31 |
| 3 | Mulchandra Gupta | 18 | M | 70 | 47 | 52 | 99 | 95 | 18 | 33 | 45 | 45 | 90 | 82 | 20 | 26 |
| 4 | Narandrasinh | 20 | M | 71 | 57 | 54 | 111 | 83 | 20 | 37 | 54 | 54 | 108 | 83 | 20 | 29 |
| 5 | Kailaschandra | 28 | M | 69 | 57 | 54 | 111 | 83 | 20 | 36 | 61 | 51 | 112 | 83 | 20 | 32 |
| 6 | Maniram | 79 | M | 71 | 64 | 41 | 105 | 61 | 16 | 25 | 55 | 57 | 112 | 75 | 16 | 35 |
| 7 | Ramawatar—I | 79 | M | 71 | 53 | 55 | 108 | 80 | 18 | 38 | 57 | 49 | 106 | 74 | 18 | 45 |
| 8 | Chhidasinh | 25 | M | 70 | 50 | 55 | 105 | 72 | 16 | 29 | 56 | 52 | 108 | 62 | 16 | 26 |
| 9 | Ramawatar—II | 16 | M | 71 | 48 | 50 | 98 | 54 | 16 | 25 | 28 | 60 | 78 | 78 | 14 | 31 |
| 10 | Kalicharan—I | 20 | M | 71 | 55 | 56 | 111 | 80 | 16 | 30 | 51 | 53 | 104 | 82 | 14 | 30 |
| 11 | Prashala Sarup | 26 | M | 67 | 52 | 58 | 110 | 74 | 16 | 23 | 46 | 57 | 103 | 69½ | 18 | 27 |
| 12 | Ramchandra Tyagi | 20 | M | 67 | 47 | 47 | 94 | 64 | 16 | 34 | 55 | 51 | 106 | 45 | 16 | 40 |
| 13 | Sukhvirsinh | 20 | M | 64 | 51 | 38 | 89 | 58 | 14 | 26 | 52 | 51 | 103 | 57½ | 12 | 29 |
| 14 | Kalicharan—II | 21 | M | 66 | 54 | 51 | 105 | 58 | 14 | 29 | 50 | 54 | 104 | 67 | 12 | 35 |
| 15 | Allabhadar | 28 | M | 65 | 50 | 51 | 101 | 79 | 14 | 37 | 50 | 57 | 107 | 78 | 14 | 38 |
| 16 | Kaluram | 23 | M | 61 | 57 | 50 | 107 | 62 | 14 | 25 | 49 | 49 | 98 | 58 | 14 | 24 |
| 17 | Gangasharan Kashyap | 22 | M | 55 | 50 | 59 | 109 | 84 | 16 | 30 | 31 | 53 | 104 | 94½ | 14 | 49 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Gangashran Kaushik | 25 | M | 51 | 45 | 51 | 96 | 82 | 18 | 30 | 35 | 35 | 68 | 77 | 18 | 27 |
| 19 | Om prakash | 22 | M | 53 | 48 | 47 | 95 | 38 | 12 | 22 | 40 | 41 | 81 | 41 | 14 | 12 |
| 20 | Jaypal, singh—I | 22 | M | 56 | 54 | 52 | 106 | 78 | 14 | 26 | 57 | 52 | 109 | 85¼ | 16 | 39 |
| 21 | Ramkumar | 25 | M | 51 | 51 | 28 | 79 | 49 | 14 | 25 | 43 | 45 | 88 | 59 | 16 | 24 |
| 22 | Ghanshyamlal | 200 | M | 57 | 45 | 45 | 90 | 28 | 12 | 12 | 54 | 49 | 103 | 34 | 12 | 22 |
| 23 | Kajjaram Tyagi | 21 | M | 56 | 49 | 52 | 101 | 72 | 14 | 36 | 50 | 53 | 103 | 69 | 14 | 32 |
| 24 | Vedprakash | 22 | M | 54 | 57 | 55 | 112 | 105 | 18 | 40 | 50 | 57 | 107 | 147 | 18 | 44 |
| 25 | Kamalsinh | 20 | M | 54 | 53 | 49 | 102 | 41 | 12 | 15 | 45 | 52 | 97 | 40 | 12 | 19 |
| 26 | Tulechahdra Soni | 26 | M | 50 | 51 | 58 | 109 | 46 | 12 | 20 | 51 | 47 | 98 | 42¾ | 14 | 20 |
| 27 | Pratapsinh | 27 | M | 52 | 51 | 52 | 103 | 62 | 16 | 30 | 51 | 49 | 100 | 78½ | 14 | 36 |
| 28 | Mahaversinh | 24 | M | 53 | 44 | 43 | 87 | 40 | 12 | 20 | 52 | 48 | 100 | 72 | 14 | 32 |
| 29 | Jaypalsinh—II | 20 | M | 50 | 54 | 53 | 107 | 45 | 12 | 21 | 53 | 51 | 104 | 69 | 14 | 31 |
| 30 | Babuji | 20 | M | 57 | 52 | 56 | 108 | 61 | 14 | 26 | 50 | 50 | 100 | 50¾ | 18 | 22 |
| 31 | Dularidevi | 15 | F | 70 | 51 | 43 | 94 | 83 | 14 | 32 | 51 | 30 | 81 | 78¾ | 16 | 36 |
| 32 | Vimla | 14 | F | 70 | 49 | 47 | 96 | 90 | 16 | 30 | 49 | 49 | 98 | 76 | 18 | 34 |
| 33 | Rajbala | 15 | F | 70 | 49 | 46 | 95 | 60 | 12 | 30 | 46 | 49 | 95 | 58 | 16 | 30 |
| 34 | Savitri | 16 | F | 69 | 43 | 44 | 87 | 84 | 16 | 32 | 59 | 53 | 103 | 80 | 17 | 32 |
| 35 | Rajeshwari | 15 | F | 69 | 46 | 44 | 90 | 85 | 16 | 30 | 33 | 48 | 81 | 80¾ | 18 | 42 |
| 36 | Sarla | 16 | F | 70 | 52 | 27 | 79 | 106 | 16 | 45 | 50 | 50 | 100 | 97 | 20 | 34 |
| 37 | Rajesh | 13 | F | 51 | 28 | 19 | 47 | 29 | 12 | 16 | 25 | 26 | 51 | 28½ | 16 | 17 |
| 38 | Shakuntala | 18 | F | 49 | 21 | 23 | 44 | 27 | 14 | 20 | 27 | 24 | 51 | 30 | 16 | 16 |
| 39 | Chamankali | 40 | F | 51 | 25 | 22 | 47 | 37 | 12 | 15 | 29 | 22 | 51 | 27 | 14 | 15 |
| 40 | Jippyari | 28 | F | 51 | 25 | 21 | 46 | 39 | 12 | 16 | 27 | 25 | 52 | 39 | 16 | 15 |
| 41 | Shikeha | 16 | F | 51 | 56 | 22 | 78 | 44 | 12 | 17 | 28 | 28 | 56 | 53 | 16 | 22 |
| 42 | Prem | 4 | F | 51 | 25 | 22 | 47 | 48 | 12 | 25 | 27 | 24 | 51 | 31 | 14 | 12 |
| 43 | Malti | 20 | F | 51 | 16 | 22 | 38 | 47 | 14 | 17 | 30 | 27 | 57 | 48 | 18 | 17 |
| 44 | Shanti | 25 | F | 51 | 24 | 20 | 44 | 35 | 12 | 15 | 32 | 25 | 57 | 40 | 14 | 12 |
| | TOTAL | | | | | | | | | | | | 3989 | 2856 | | |

Name of Parishramalaya : HAPUR (U.P.) Date of Starting 20-1-56 Number of Charkha sets : 60

| Serial No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Ramkumarbhai | 20 | M | 85 | 60 | 60 | 120 | 88 | 14 | 30 | 64 | 64 | 128 | 73 | 14 | 20 |
| 2 | Vadansinh | 24 | M | 85 | 60 | 60 | 120 | 78 | 14 | 25 | 36 | 36 | 72 | 30 | 14 | 13 |
| 3 | Dharwirsinh | 19 | M | 85 | 60 | 60 | 120 | 78 | 16 | 25 | 64 | 64 | 128 | 53 | 14 | 12 |
| 4 | Rohilakhbhai | 30 | M | 65 | 60 | 60 | 120 | 85 | 14 | 25 | 64 | 64 | 128 | 96 | 16 | 35 |
| 5 | Rajkumarbhai | 29 | M | 85 | 60 | 60 | 120 | 85 | 14 | 30 | 64 | 64 | 128 | 82 | 16 | 20 |
| 6 | Mahendrasinh | 22 | M | 85 | 60 | 60 | 120 | 69 | 12 | 20 | 64 | 64 | 128 | 64 | 14 | 25 |
| 7 | Dhidhasinh | 22 | M | 85 | 60 | 60 | 120 | 192 | 12 | 25 | 64 | 64 | 128 | 79 | 14 | 22 |
| 8 | Lakliprasad | 19 | M | 85 | 60 | 60 | 120 | 69 | 10 | 30 | 64 | 64 | 128 | 69 | 12 | 20 |
| 9 | Jamulkishor | 20 | M | 65 | 60 | 60 | 120 | 51 | 122 | 20 | 64 | 64 | 128 | 86 | 10 | 17 |
| 10 | Chuksasinh | 19 | M | 85 | 60 | 60 | 120 | 73 | 14 | 25 | 64 | 64 | 128 | 60 | 14 | 15 |
| 11 | Kishanlalji | 19 | M | 85 | 60 | 60 | 120 | 64 | 12 | 20 | 64 | 64 | 128 | 49 | 14 | 20 |
| 12 | Sureshchandra | 20 | M | 85 | 43 | 48 | 96 | 59 | 10 | 35 | 64 | 64 | 128 | 64 | 12 | 20 |
| 13 | Mahendrasinh Gaud | 21 | M | 83 | 60 | 60 | 120 | 87 | 15 | 25 | 64 | 64 | 128 | 50 | 14 | 25 |
| 14 | Lunharisinh | 20 | M | 84 | 60 | 60 | 120 | 95 | 16 | 25 | 64 | 64 | 128 | 95 | 18 | 25 |
| 15 | Chandarkisher | 20 | M | 84 | 60 | 60 | 120 | 85 | 15 | 25 | 64 | 64 | 128 | 96 | 18 | 25 |
| 16 | Harishankarbhai | 20 | M | 84 | 44 | 44 | 88 | 37 | 16 | 20 | 64 | 64 | 128 | 74 | 16 | 28 |
| 17 | Nrutyusinh | 21 | M | 84 | 28 | 28 | 56 | 46 | 14 | 10 | 64 | 64 | 128 | 71 | 16 | 20 |
| 18 | Baburam | 21 | M | 83 | 60 | 60 | 120 | 59 | 12 | 20 | 64 | 64 | 128 | 55 | 14 | 25 |
| 19 | Asharam | 22 | M | 83 | 60 | 60 | 120 | 99 | 14 | 30 | 64 | 64 | 128 | 104 | 14 | 20 |
| 20 | Pannalal | 19 | M | 83 | 60 | 60 | 120 | 66 | 10 | 10 | 64 | 64 | 128 | 60 | 12 | 10 |
| 21 | Koshasinh | 22 | M | 76 | 60 | 60 | 120 | 82 | 14 | 25 | 64 | 64 | 128 | 70 | 12 | 25 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | Murari-Lalbhai . . . | 20 | M | 76 | 60 | 60 | 120 | 72 | 12 | 30 | 64 | 64 | 128 | 66 | 10 | 20 |
| 23 | Ramnivasbhai . . . . | 20 | M | 76 | 60 | 60 | 120 | 64 | 10 | 15 | 57 | 57 | 114 | 57 | 10 | 25 |
| 24 | Shingasharanbhai . . . | 35 | M | 89 | 60 | 60 | 120 | 91 | 10 | 33 | 64 | 64 | 128 | 98 | 10 | 30 |
| 25 | Bhaivalsinh . . . . | 20 | M | 89 | 60 | 60 | 120 | 78 | 14 | 20 | 64 | 64 | 128 | 66 | 14 | 17 |
| 26 | Jaiprakash . . . . | 19 | M | 89 | 60 | 60 | 120 | 92 | 14 | 30 | 64 | 64 | 128 | 60 | 12 | 30 |
| 27 | Vaijnathram . . . . | 19 | M | 89 | 60 | 60 | 120 | 62 | 14 | 30 | 64 | 64 | 128 | 60 | 12 | 32 |
| 28 | Mansinbhai . . . | 22 | M | 87 | 60 | 60 | 120 | 88 | 16 | 25 | 64 | 64 | 128 | 47 | 14 | 27 |
| 29 | Panekhadi . . . . | 19 | M | 85 | 28 | 28 | 56 | 29 | 12 | 15 | 32 | 32 | 64 | 35 | 10 | 5 |
| 30 | Maheshsinh . . . . | 18 | M | 85 | 60 | 60 | 120 | 86 | 14 | 25 | 52 | 52 | 104 | 62 | 12 | 30 |
| 31 | Kannadevi . . . . | | F | 95 | 30 | 30 | 60 | 41 | 12 | 13 | 32 | 32 | 64 | 31 | 14 | 5 |
| 32 | Jaibunishad . . . . | | F | 93 | 30 | 30 | 60 | 63 | 20 | 15 | 32 | 32 | 64 | 44 | 18 | 8 |
| 33 | Kashakumari . . . . | | F | 92 | 30 | 30 | 60 | 29 | 14 | 10 | 32 | 32 | 64 | 28 | 14 | 3 |
| 34 | Vidyavalidevi . . . . | | F | 91 | 30 | 30 | 60 | 40 | 12 | 10 | 32 | 32 | 64 | 27 | 14 | 12 |
| 35 | Liladevi . . . . . | | F | 91 | 30 | 30 | 60 | 50 | 18 | 13 | 32 | 32 | 64 | 48 | 18 | 5 |
| 36 | Rhmkani . . . . | | F | 90 | 30 | 30 | 60 | 43 | 16 | 10 | 32 | 32 | 64 | 29 | 16 | 8 |
| 37 | Radhadevi . . . . | | F | 90 | 30 | 30 | 60 | 66 | 16 | 10 | 32 | 32 | 64 | 51 | 18 | 15 |
| 38 | Nareshkumari . . . . | | F | 90 | 30 | 30 | 60 | 28 | 14 | 7 | 32 | 32 | 64 | 22 | 14 | 6 |
| 39 | Jivanidevi . . . . | | F | 85 | 14 | 14 | 28 | 17 | 14 | 10 | 32 | 32 | 64 | 47 | 12 | 8 |
| 40 | Lalkaurdevi . . . . | | F | 83 | 30 | 30 | 60 | 54 | 12 | 13 | 32 | 32 | 64 | 46 | 14 | 20 |
| 41 | Ramkumaridevi . . . | | F | 95 | 30 | 30 | 60 | 52 | 22 | 17 | 32 | 32 | 64 | 49 | 20 | 13 |
| 42 | Trivenidevi . . . | | F | 93 | 30 | 30 | 60 | 42 | 20 | 10 | 32 | 32 | 64 | 37 | 18 | 6 |
| 43 | Kashmiridevi . . . . | | F | 93 | 30 | 30 | 60 | 58 | 22 | 15 | 32 | 32 | 64 | 53 | 14 | 13 |
| 44 | Umadevi . . . . | | F | 92 | 30 | 30 | 60 | 36 | 14 | 8 | 32 | 32 | 64 | 21 | 14 | 5 |
| 45 | Vidyavatidevi . . . . | | F | 92 | 30 | 30 | 60 | 25 | 14 | 7 | 32 | 32 | 64 | 24 | 18 | 7 |
| 46 | Rameshwaridevi. . . . | | F | 91 | 30 | 30 | 60 | 38 | 14 | 7 | 32 | 32 | 64 | 46 | 12 | 13 |
| 47 | Omkumari . . . . | | F | 92 | 30 | 30 | 60 | 66 | 18 | 15 | 32 | 32 | 64 | 51 | 16 | 3 |
| 48 | Sumitradevi . . . . | | F | 86 | 14 | 14 | 28 | 13 | 14 | 4 | 16 | 16 | 32 | 30 | 12 | 5 |
| 49 | Rajashawridevi . . . | | F | 78 | 30 | 30 | 60 | 34 | 10 | 10 | 32 | 32 | 64 | 37 | 10 | 10 |
| 50 | Anguridevi . . . . | | F | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | | 4866 | 2759 | | |

Name of Parishramalaya : Buland Shahar.

| Serial No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March to 27th March 56 Duration of work (Hours) Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | From 28th March to 13th April 1956 Duration of Work (Hours) Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15. | 16 |
| 1 | Shri Klemchandrabhai . . : | 19 | M | 72 | 36½ | 36½ | 73 | 49 | 14 | .. | 39 | 41 | 80 | 60½ | 16¼ | .. |
| 2 | Shri Chandramanbhai . . . | 18 | M | 75 | 86½ | 93 | 179½ | 89¼ | 14 | 9 | 168 | 54 | 222 | 83¼ | 14 | .. |
| 3 | Shri Keharbhai . . . . | 22 | M | 75 | 45 | 29 | 74 | 69 | 14 | 21 | 60 | 53 | 113 | 87 | 14 | .: |
| 4 | Shri Gangasharanbhai . . . | 20 | M | 75 | 43½ | 36 | 79½ | 43 | 12 | 24 | 50 | 55 | 105 | 67 | 14 | .. |
| 5 | Shri Tekchandbhai . . . | 22 | M | 75 | 59¾ | 46½ | 106½ | 63 | 14 | .. | 54 | 61 | 115 | 90½ | 16 | .. |
| 6 | Shri Jayprakshbhai . . . | 21 | M | 75 | 35½ | 28½ | 64 | 28½ | • 12 | 50 | 66½ | 39½ | 106 | 52½ | 14 | .. |
| 7 | Shri Mohanlalbhai . . . | 21 | M | 75 | 49 | 53 | 102 | 72 | 14 | 10 | 77 | 55 | 132 | 56 | 10 | .. |
| 8 | Shri Surajmanbhai . . . | 20 | M | 75 | 42 | 46 | 83 | 69 | 14 | .. | 75½ | 31 | 105½ | 78 | 14 | .. |
| 9 | Shri Vatchitravir Bhai . . | 23 | M | 75 | 38½ | 44 | 82½ | .. | 14 | 12 | 55 | 42 | 97 | 76 | 14 | .. |
| 10 | Sh riRajasinghbhai . . . | 20 | M | 75 | 44¼ | 41¾ | 86 | 67 | 14 | .. | 58 | 59½ | 117½ | 62 | 14 | 27½ |
| 11 | Shri Mukhvirsinghbhai . . | 23 | M | 75 | 46½ | 50½ | 97 | 62½ | 14 | .. | 56½ | 54½ | 111 | 71 | 14 | 85 |
| 12 | Shr iVijaysingh . . . | 19 | M | 75 | 30 | 32 | 62 | 43 | 14 | 22½ | 31 | 41 | 72 | 27 | 14 | 17 |
| 13 | Shri Girishchandraji . . | 19 | M | 75 | 43½ | 43½ | 87 | 73 | 14 | 9 | 45¼ | 43¼ | 89 | 78 | 14 | 32¼ |
| 14 | Shri Rambharoseji . . . | 22 | M | 75 | 53 | 46 | 99 | 49 | 34 | 77½ | 25 | 37 | 62 | 42 | 18 | 1 |
| 15 | Shri Ramdeobhai . . . | 19 | M | 75 | 41 | 46 | 87 | 72 | 14 | .. | 25 | 51½ | 76½ | 67 | 18 | 27½ |
| 16 | Shri Madanlalbhai . . . | 22 | M | 75 | 49 | 41½ | 90½ | 65½ | 12 | 101 | 53 | 41 | 94 | 89 | 18 | 77½ |
| 17 | Shri Nepalsingh . . . | 20 | M | 75 | 34 | 39½ | 73½ | 68 | 14 | 34 | 6 | 6 | 12 | 17 | 14 | 81¼ |
| 18 | Shri Nanakchandbhai . . | 20 | M | 70 | 29 | 31 | 58 | 38 | 10 | 36¼ | 19 | 31 | 50 | 35 | 14 | .. |
| 19 | Shri Rajpal . . . . | 21 | M | 70 | 40 | 49 | 89 | 49 | 14 | 33¼ | 58½ | 52 | 110½ | 63 | 16 | .. |
| 20 | Shri Balkrishan . . . . | 22 | M | 75 | 42 | 56 | 98 | 30½ | 12 | 82½ | 14 | 40 | 54 | 23 | 10 | .. |
| 21 | Shrimati Amratlatabhen . . | 20 | F | 75 | 42 | 56 | 98 | 30½ | 12 | 82½ | 24 | 40 | 64 | 28 | 10 | .. |
| 22 | Shrimati Pushpalumariben . . | 16 | F | 72 | 49 | 57 | 106 | 76 | 14 | .. | 50 | 65 | 115 | 83 | 10 | 32½ |
| 23 | Shrimati Sashiprabhaben . . | 17 | F | 61 | 61 | 29 | 61 | 45 | 12 | 10½ | 60 | 57 | 117 | 91 | 10 | .: |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | Shrimati Urmila Varma | 14 | F | 66 | 56 | 50 | 106 | 66 | 14 | 43¼ | 29 | 39 | 68 | 48 | 14 | .. |
| 25 | Shrimati Sushilaban | 20 | F | 72 | 45 | 50 | 95 | 42½ | 10 | 20 | 46 | 60 | 106 | 49½ | 16 | 40 |
| 26 | Shri Puranchandrabhai | 20 | M | 68 | 55 | 41½ | 96½ | 55 | 14 | 35 | 58 | 53 | 111 | 88 | 18 | .. |
| 27 | Shri Hulasiram | 20 | M | 68 | 34 | 44 | 78 | 53 | 12 | .. | 57 | 51 | 108 | 74½ | 16 | 55 |
| 28 | Shri Jagannathbhai | 18 | M | 60 | 30½ | 29 | 59½ | 47 | 12 | 11½ | 56 | 53 | 109 | 103 | 16 | .. |
| 29 | Shri Phulchandbhai | 24 | M | 60 | 56 | 49 | 110 | 52 | 16 | .. | 53 | 59 | 112 | 73 | 16 | 17½ |
| 30 | Shri R. Patibhai | 20 | M | 60 | 40 | 36 | 76 | 31 | 12 | 67½ | 47¼ | 45½ | 93½ | 50 | 14 | 63 |
| 31 | Shri Chetrambhai | 21 | M | 67 | 44¾ | 52 | 96¾ | 82 | 12 | .. | 38½ | 53 | 91½ | 80 | 16 | 40 |
| 32 | Shri Sarjitbhai | 19 | M | 67 | 66½ | 37½ | 104 | 38 | 12 | 42½ | 52½ | 49½ | 102 | 50¾ | 16 | 62½ |
| 33 | Shri Tegpalbhai | 20 | M | 65 | 31 | 34½ | 65½ | 44½ | 14 | 36½ | 22 | 25 | 47 | 36 | 16 | 11 |
| 34 | Shri Dhaneshchandrabhai | 22 | M | 67 | 42 | 41 | 83 | 40 | 10 | 13½ | 55 | 55 | 110 | 49 | 16 | 72½ |
| 35 | Shri Bharamudattji | 20 | M | 69 | 43 | 45½ | 88½ | 43 | 12 | 77½ | 50½ | 54½ | 104½ | 61 | 16 | .. |
| 36 | Shri Fulchandbhai | 20 | M | 60 | 35 | 25 | 60 | 11 | 10 | 86¼ | 36 | 49 | 85 | 16 | 14 | 32 |
| 37 | Shri Ramkishanbhai | 20 | M | 60 | 43½ | 49½ | 93 | 59 | 12 | 58¼ | 3½ | 23½ | 27 | 50 | 12 | 5 |
| 38 | Shrimati Ramvatibahin | 21 | F | 59 | 43 | 53 | 96 | 42½ | 10 | 18¼ | 56 | 60 | 116 | 64 | 14 | 8½ |
| 39 | Shri Ramsevkbhai | 21 | M | 65 | 50 | 52½ | 102½ | 63 | 10 | .. | 54½ | 58 | 112½ | 79 | 20 | 17½ |
| | Shri Shivnarayan Tivari | 22 | M | 65 | 55 | 35 | 90 | 67 | 12 | .. | 62 | 36 | 98 | 84 | 16 | .. |
| 41 | Shri Bhagwanbhai | 20 | M | 67 | 85½ | 44½ | 130 | 45½ | 12 | 20 | 56 | 58½ | 114½ | 79 | 14 | 7 |
| 42 | Shri Chundansingh | 18 | M | 51 | 58½ | 51½ | 110 | 68 | 14 | 16¼ | 60 | 60 | 120 | 70 | 14 | .. |
| 43 | Shri Harishchandra Varma | 20 | M | 53 | 46½ | 55 | 101½ | 55 | 14 | 46½ | 52 | 59 | 111 | 80 | 12 | 17 |
| 44 | Shri Mukandasingh | 20 | M | 64 | 49 | 49 | 98 | 63 | 12 | 30 | 55 | 51½ | 106½ | 66 | 14 | .. |
| 45 | Shri Ramchandrasingh | 20 | M | 64 | 50¾ | 52½ | 103½ | 63 | 14 | 58¾ | 56½ | 52½ | 109 | 80 | 16 | .. |
| 46 | Shri Ramshanker | 19 | M | 70 | 55 | 52 | 107 | 82 | 12 | .. | 52½ | 52½ | 104½ | 82 | 1 | .. |
| 47 | Shri Harishchandra | 18 | M | 70 | 51 | 60 | 111 | 64½ | 8 | 26½ | 39½ | 55½ | 95 | 59 | 14 | 72½ |
| 48 | Shri Mahalhakimkhan | 18 | M | 59 | 56 | 56 | 112 | 63 | 10 | .. | 54 | 56 | 110 | 70 | 14 | 50 |
| 49 | Shri Rikhpal Singh | 23 | M | 56 | 52 | 43 | 95 | 53 | 9 | 146¼ | 56 | 56½ | 112½ | 74 | 14 | 16½ |
| 50 | Shri Nand Kishore | 22 | M | 58 | 56 | 56 | 112 | 67 | 12 | .. | 58½ | 58½ | 117 | 65 | 14 | 50 |
| 51 | Shri Sohan Lal Ji | 21 | M | 58 | 48½ | 56 | 10¾ | 72 | 9 | 36½ | 60½ | 63½ | 124 | 94 | 14 | 47½ |
| 52 | Shri Gurprashad | 22 | M | 70 | 46 | 52 | 98 | 81 | 8 | 6½ | 50½ | 51½ | 102 | 78 | 16 | 80 |
| 53 | Shri Rambiharibhai | 23 | M | 66 | 54 | 48½ | 110½ | 71 | 9 | 6½ | 51 | 52½ | 103½ | 90 | 16 | 95 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 54 | Shri Jagpalsingh | 21 M | 66 | 46 | 40 | 86 | 90 | 9 | 38½ | 50 | 52½ | 103½ | 83 | 16 | 52½ |
| 55 | Shri Ved Prakashbhai | 20 M | 87 | 89 | 44 | 133 | 63½ | 8 | .. |  | 6 | 111 | 85 | 12 | 77½ |
| 56 | Shri Gangasagarbhai | 18 M | 63 | 56 | 40 | 96 | 60 | 12 | .. | 68 | 48½ | 111½ | 87 | 12 | .. |
| 57 | Shri Shivraji Bhai | 20 M | 57 | 82 | 78 | 160 | 88 | 8 | 5 | 56 | 55½ | 111½ | 73 | 14 | 25 |
| 58 | Shri Raghuvirsaranbhai |  | 59 | 44 | 45 | 89 | 69 | 8 | .. | 55 | 59 | 114 | 83 | 14 | 77 |
| 59 | Shri Ramkrishan Gupta |  | 67 | 53½ | 53 | 105½ | 66 | 9 | 10 | 10½ | 47½ | 112 | 61½ | 18 | 55 |
| 60 | Shri Ramsarup Singh |  | 67 | 53 | 52 | 106 | 71 | 9 | .. | 59 | 56 | 118 | 68 | 14 | 117 |
| 61 | Shri Om Prakashbha |  | 68 | 56 | 56 | 112 | 65 | 10 | .. | 58 | 60½ | 119½ | 82 | 14 | 96½ |
| 62 | Shri Deshrajbhai |  | 60 | 58½ | 56 | 114½ | 60 | 10 | .. | 77 | 56 | 133 | 65 | 14 | 28¾ |
| 63 | Shri Vijaysingh |  | 63 | 48 | 48 | 96½ | 50 | 12 | 50 | 56 | 59 | 115 | 93½ | 14 | 46½ |
| 64 | Shri Bhopal singh |  | 69 | 50½ | 49½ | 100 | 64½ | 9 | 21⅓ | 50½ | 60 | 100½ | 63 | 18 | 63½ |
| 65 | Shri Jayshankar Mishra |  | 56 | 56 | 51 | 107 | 80 | 12 | 22½ | 60 | 55½ | 125½ | 72 | 14 | 111½ |
| 66 | Shri Harhal Singh |  | 53 | 50 | 48 | 98 | 57 | 9 | .. | 43 | 42 | 185 | 49 | 14 | 115 |
| 67 | Shri Mahabir Singh |  | 60 | 54½ | 54½ | 105½ | 57 | 10 | .. | 55 | 56 | 111 | 66 | 14 | 16 |
| 68 | Shri Ishwar Singh |  | 63 | 60 | 60 | 120 | 46 | 12 | 90 | 60 | 66 | 126 | 67½ | 16 | 43 |
| 69 | Shri Budh Singh |  | 43 | 50½ | 42½ | 93 | 28 | 8 | .. | 66½ | 66 | 133 | 52 | 14 | .. |
| 70 | Shri Chandra Pal |  | 47 | 49 | 48½ | 107½ | 60 | 10 | 45 | 52½ | 55 | 107½ | 77 | 14 | .. |
| 71 | Shri Ram Chandra |  | 57 | 52 | 49 | 101 | 48½ | 12 | .. | 56 | 51½ | 107½ | 63 | 14 | .. |
| 72 | Shri Vidhyamber |  | 56 | 43 | 39 | 82 | 17 | 10 | 107⅓ | 33 | 39 | 72 | 28 | 12 | 70 |
| 73 | Shri Raghuvir Prashad |  | 62 | 44 | 52½ | 96 | 56 | 8 | 7½ | 51 | 58½ | 100½ | 82 | 14 | 62½ |
| 74 | Shri Devendrakumar |  | 62 | 42 | 50 | 92 | 49 | 10 | .. | 56 | 56 | 112 | 58 | 16 | .. |
| 75 | Shri Khubi Ram |  | 66 | 55 | 52 | 107 | 82 | 10 | 55 | 58 | 60 | 118 | 75 | 16 | .. |
| 76 | Shri Raghuram Sharma |  | 53 | 53 | 68 | 120 | 38 | 14 | .. | 56 | 44 | 100 | 48 | 14 | 11½ |
| 77 | Shri Morarilal |  | 56 | 52 | 58 | 110 | 34 | 14 | .. | 56 | 44 | 100 | 48 | 14 | 1½ |
| 78 | Shri Kanaiyalal |  | 53 | 47½ | 45½ | 87 | 48½ | 14 |  | 41 | 22 | 63 | 60 | 14 | 89½ |
| 79 | Shrimati Usha Kumari |  |  |  |  |  |  |  |  | 70 | 22 | 92 | 16 | 12 | 80 |
|  |  | TOTAL |  |  |  |  |  |  |  |  |  | 8068 | 5158 |  |  |

Name of Parishramalaya : Kaudiya Ganj (U.P.) Date of Starting: 13-1-56 Number of Charkha sets : 19

| Serial No. | Name of Operative | Class of Spinner | | No. of days of Trg. | From 10th March, 56 to 27th March, 56 | | | | | | From 28th March 56 to 14 April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Kalacharanbhai | 18 | M | 61 | 48¾ | 25¾ | 74½ | 70 | 9 | 40 | 24½ | 20 | 44½ | 80¼ | 14 | 20 |
| 2 | Jamishbhai | 18 | M | 63 | 44 | 43¾ | 87¾ | 50½ | 10 | 60½ | 26 | 21 | 47 | 31½ | 12 | 25 |
| 3 | Sudram | 19 | M | 64 | 38 | 25¼ | 63¼ | 45 | 8 | 25 | 21 | 23 | 44 | 43 | 16 | 25 |
| 4 | Sopal | 21 | M | 59 | 25 | 22 | 47 | 46 | 12 | 25 | 22 | 22½ | 44½ | 41 | 14 | 25 |
| 5 | Baman | 18 | M | 63 | 44 | 43 | 57 | 57 | 12 | 35 | 23¾ | 28 | 31½ | 43 | 14 | 38 |
| 6 | Bharaj | 22 | M | 57 | 38 | 25½ | 63½ | 34 | 1 | 30 | 24 | 23¾ | 47¾ | 45½ | 20 | 15 |
| 7 | Devinandan | 18 | M | 61 | 33¼ | 30¼ | 63½ | 58 | 12 | 80 | 42 | 39 | 79 | 76½ | 20 | 10 |
| 8 | Dojram | 18 | M | 54 | 20 | 60 | 30½ | 30½ | 8 | 55 | 12 | 20 | 32 | 8 | 81 | 10 |
| 9 | Niranjan | 22 | M | 58 | 33 | 25 | 58 | 52 | 10 | 30 | 31 | 27 | 58 | 39 | 12 | 25 |
| 10 | Sueshchandra | 20 | M | 49 | 35 | 35½ | 70½ | 39 | .. | 30 | | | | | | |
| 11 | Shmidher | 12 | M | 50 | 21 | 25½ | 46½ | 28¾ | 8 | 30 | 22 | 20 | 42 | 37½ | 14 | 30 |
| 12 | Rammohan | 18 | M | 63 | 33 | 30½ | 63½ | 51 | 10 | 25 | 20 | 24 | 44 | 99 | 12 | 30 |
| 13 | Khajan | 19 | M | 62 | 44 | 43 | 87 | 70 | 12 | 40 | 20 | 14 | 34 | 58 | 16 | 45 |
| 14 | Amkhiladi | 18 | M | 63 | 98 | 39½ | 67½ | 48 | 10 | 40 | 22 | 26 | 48 | 29 | 10 | 20 |
| 15 | Ramdatt | 21 | M | 65 | 44½ | 44¼ | 88¾ | 65 | 12 | 30 | 42 | 39 | 81 | 41 | 14 | 25 |
| 16 | Om Prakash | 19 | M | 63 | 37 | 29 | 66 | 57 | 10 | 35 | 37½ | 30¼ | 67¾ | 38 | 12 | 25 |
| 17 | Ghansyam | 23 | M | 56 | 32 | 27 | 59 | 49 | 10 | 30 | 34 | 22¾ | 56¾ | 32 | 12 | 20 |
| 18 | Ramji | 18 | M | 58 | 38 | 39½ | 77½ | 60 | 12 | 55 | 33 | 33½ | 66½ | 30 | 14 | 20 |
| 19 | Sotansinh | 23 | M | 51 | 24½ | 24½ | 49 | 29½ | 8 | 20 | 40¼ | 40¼ | 80½ | 27 | 12 | 25 |
| 20 | Satyapal | 21 | M | 63 | 38 | 39½ | 77½ | 67 | 12 | 35 | 29¾ | 30¾ | 60½ | 40 | 10 | 35 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age-Sex | | | | | | | | | | | | | | |
| 21 | **Surajpal** | 21 | M | 64 | 43 | 42½ | 85½ | 60 | 12 | 35 | 24 | 26 | 50 | 46¼ | 12 | 40 |
| 22 | **Rajpal** | 19 | M | 57 | 32 | 27½ | 59½ | 30 | 8 | 20 | 12 | 18 | 30 | 14 | 8 | 25 |
| 23 | **Rev i** | 20 | F | 58 | 44 | 33 | 77 | 60 | 12 | 40 | 22 | 24 | 46 | 49¾ | 16 | 20 |
| 24 | **Manohar I** | 24 | M | 64 | 29¾ | 30¾ | 60½ | 38 | 8 | 30 | 32 | 20 | 52 | 44¼ | 10 | 20 |
| 25 | **Narayan** | 20 | M | 62 | 34 | 30½ | 64½ | 40¾ | 9 | 20 | 20 | 16 | 36 | 18¼ | 10 | 15 |
| 26 | **Deshraj** | 25 | M | 60 | 30 | 22 | 52 | 39 | 12 | 20 | 14 | 20 | 34 | 36 | 20 | 20 |
| 27 | **Manhorlal** | 20 | M | 60 | 42 | 30 | 72 | 40 | 10 | 15 | 24 | 16 | 40 | 25 | 12 | 15 |
| 28 | **Rajpal II** | 18 | M | 62 | 38¾ | 39 | 77½ | 44 | 16 | 23 | 44 | 37 | 81 | 37½ | 12 | 40 |
| 29 | **Prakashchandra** | 19 | M | 58 | 37 | 33 | 70 | 38½ | 10 | 23 | 38½ | 36¾ | 75¼ | 40 | 9 | 20 |
| 30 | **Dharmvir** | 18 | M | 60 | 42½ | 40 | 82¼ | 59 | 20 | 3 | 28½ | 31 | 59¼ | 39 | 14 | 20 |
| 31 | **Bhavat Dayal** | 24 | M | 55 | 34 | 43¾ | 77¾ | 45 | 12 | 30 | 44 | 37 | 81 | 45 | 14 | 30 |
| 32 | **Charansinh** | 18 | M | 59 | 38¾ | 31 | 69¾ | 52 | 10 | 40 | 47½ | 36 | 83½ | 60½ | 14 | 40 |
| 33 | **Kishorilal** | 20 | M | 61 | 28½ | 42½ | 70¼ | 35½ | 9 | 33 | 28½ | 31 | 59½ | 41 | 14 | 43 |
| 34 | **Liladhar** | 23 | M | 57 | 39¼ | 38½ | 76½ | 61¼ | 12 | 30 | 38¼ | 36¾ | 75 | 48 | 12 | 23 |
| 35 | **Om Prakash I** | 21 | M | 45 | 34 | 43¾ | 77¾ | 2 | 10 | 10 | .. | .. | .. | .. | .. | .. |
| 36 | **Rushikumar** | 19 | M | 42 | 37¼ | 33 | 70¼ | 33 | 8 | 20 | 47½ | 36 | 83½ | 53 | 14 | 23 |
| 37 | **Pannalal** | 18 | M | 55 | 42 | 30 | 72 | 44 | 16 | 30 | 24 | 16 | 40 | 15 | 8 | 20 |
| | TOTAL | | | | | | | | | | | | 2,015 | 1,551 | | |

**Name of Parishramalaya: Aligarh (U.P.)** (*Incomplete*) Date of Starting: 13-1-56 Number of Charkha sets: 5

| S. No. | Name of Operative | Class of Spinner | No. of days of Trg. | From 10th March, 56 to 27th March, 56 Duration of work (Hours) Car-ding | Spg. | Total | Pro-dn. hanks | Count | Loss Tolas | From 28th March, 56 to 13th April, 56 Duration of work (Hours) Card-ing | Spg. | To-tal | Pro-dn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age-Sex | | | | | | | | | | | | | |
| 1 | Bheverbhai | 30 M | 73 | 24 | 23½ | 47½ | 35 | 8 | 15 | 13 | 97 | 110 | 22 | 8 | 19 |
| 2 | Lalitaprasad bhai | 21 M | 74 | 36½ | 36 | 72½ | 38 | 8 | 19 | 24½ | 20 | 44½ | 24 | 8 | 25 |
| 3 | Omprakash Gupta | 16 M | 75 | 25½ | 22¼ | 47¾ | 31 | 10 | 15 | 21 | 23 | 44 | 26 | 10 | 18 |
| 4 | Jodhpal singh | 21 M | 75 | 38¾ | 35¼ | 74 | 50¼ | 8 | 30 | 37¼ | 30¼ | 68½ | 34 | 61 | 30 |
| 5 | Harekrishna | 21 M | 75 | 48½ | 25¾ | 74½ | 27½ | 8 | 25 | 22 | 22¼ | 44¼ | 25 | 8 | 22 |
| 6 | Mohanlal | 20 M | 77 | 31 | 25 | 56 | 28½ | 8 | 8 | 26 | 21 | 47 | 22 | 8 | 16 |
| 7 | Baheril | 20 M | 72 | 43½ | 87½ | 87¾ | 8 | 8 | 30 | 43¾ | 41¼ | 84 | 66 | 11 | 45 |
| 8 | Rameshchandra | 22 M | 76 | 38 | 25½ | 63¾ | 30 | 10 | 18 | 31½ | 27 | 58½ | 32 | 12 | 21 |
| 9 | Matiketan | 18 M | 72 | 34½ | 35½ | 69¾ | 62 | 8 | 30 | 32 | 34¼ | 66½ | 34 | 11 | 25 |
| 10 | Haimrajsinh | 21 M | 73 | 34½ | 28½ | 63 | 28 | 8 | 25 | 35½ | 31 | 66½ | 38 | 11 | 35 |
| 11 | Lapaksinh | 21 M | 77 | 24½ | 24½ | 49 | 26½ | 8 | 25 | 33 | 33 | 66 | 41 | 10 | 24 |
| 12 | Sobharam | 20 M | 73 | 33¼ | 30½ | 43¼ | 28¼ | 10 | 26 | 34 | 26 | 60 | 26½ | 12 | 45 |
| 13 | Karilal Panchori | 18 M | 77 | 40½ | 48 | 88½ | 60½ | 10 | 33 | 30½ | 30½ | 61 | 52 | 11 | 25 |
| 14 | Katahchandra Sharma | 20 M | 77 | 32½ | 38¼ | 71½ | 51 | 11 | 35 | 36 | 35 | 71 | 45 | 12 | 27 |
| 15 | Ramjilal Nagar | 20 M | | | | | | | | 11 | | | | 11 | |
| 16 | Prasadilal | 20 M | 75 | 31½ | 35½ | 67 | 30 | 10 | 21 | 23¾ | 28 | 51¾ | 36½ | 10 | 30 |
| 17 | Maheshchandra Sharma | 21 M | 76 | 31¼ | 32¾ | 64¾ | 49½ | 12 | 29 | 34 | 36 | 70 | 55 | 10 | 33 |
| 18 | Narayansinh | 18½ M | 73 | 46¼ | 43¼ | 89½ | 13 | 13 | 32 | 42 | 38 | 80 | 68 | 11 | 30 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age-Sex | | | | | | | | | | | | | |
| 19 | Karansinh . . . . | 16½ M | 73 | 47 | 46½ | 93½ | 58 | 12 | 30 | 43½ | 41½ | 84¾ | 70½ | 10 | 45 |
| 20 | Muhmad Chaukal . . . | 20 M | 79 | 36 | 48½ | 84½ | 51 | 13 | 25 | 40½ | 40½ | 80¾ | 64 | 11 | 25 |
| 21 | Vrijmohan Sharma . . . | 18 M | 76 | 37 | 28 | 65 | 38 | 10 | 30 | 36½ | 34½ | 70¾ | 71½ | 10 | 45 |
| 22 | Mohmad Ayub . . . . | 20 M | 70 | 38¾ | 44¾ | 83½ | 128½ | 11 | 30 | 38½ | 38½ | 77 | 64 | 12 | 32 |
| 23 | Ramjibasmo . . . . | 20 M | 77 | 32¾ | 27¾ | 60 | 51 | 12 | 25 | 36 | 32¾ | 75¾ | 55 | 11 | 22 |
| 24 | Kanchansinh Sharma . . . | 18½ M | 69 | 43 | 42½ | 85¼ | 59½ | 10 | 28 | 37½ | 37 | 74½ | 53¾ | 10 | 42 |
| 25 | Ramsevak Sharma . . . | 22 M | 74 | 38 | 38½ | 76½ | 52 | 10 | 40 | 28½ | 30¾ | 59½ | 38 | 11 | 24 |
| | TOTAL . | | | | | | | | | | | 1,617 | 1,073 | | |

Name of Parishramalaya : Raipur (U.P.) Date of Starting 19-1-56 Number of Charkha sets : 19

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing. | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Baburambhai | 20 M | 67 | 55 | 54 | 109 | 77 | 10 | 34 | 40 | 40 | 80 | 64½ | 12 | 30 |
| 2 | Virsen | 21 M | 71 | 54 | 50 | 104 | 57 | 10 | 20 | 59 | 59 | 118 | 95 | 12 | 30 |
| 3 | Brahmsinh | 19 M | 71 | 45 | 51 | 96 | 71 | 12 | 30 | 62 | 64 | 126 | 64 | 14 | 30 |
| 4 | Brahmati | 19 M | 67 | 54 | 50 | 104 | 48 | 12 | 18 | 57 | 50 | 107 | 53 | 15 | 19 |
| 5 | Rabidatt | 20 M | 69 | 50 | 52 | 102 | 75 | 10 | 37 | 49 | 45½ | 94½ | 61 | 12 | 30 |
| 6 | Bhupsinh | 20 M | 70 | 52 | 54 | 106 | 77 | 10 | 33 | 55 | 50 | 105 | 64 | 12 | 26 |
| 7 | Ramkrishna | 22 M | 67 | 56 | 57 | 113 | 59 | 10 | 26 | 40 | 40 | 80 | 79 | 11 | 20 |
| 8 | Udaysinh | 19 M | 63 | 57 | 58 | 115 | 99 | 12 | 41 | 16 | 22½ | 38½ | 30 | 12 | 10 |
| 9 | Mankiram | 20 M | 66 | 56 | 57 | 113 | 87 | 12 | 35 | 52 | 52 | 104 | 83 | 11 | 35 |
| 10 | Sarafrajsinh | 21 M | 70 | 58 | 59 | 117 | 120 | 13 | 45 | 48 | 47 | 95 | 71 | 14 | 35 |
| 11 | Sadhuram I | 21 M | 67 | 54 | 50 | 104 | 71 | 15 | 25 | 79 | 46 | 125 | 88 | 15 | 20 |
| 12 | Somdatt | 22 M | 69 | 56 | 58 | 114 | 99 | 15 | 33 | 42 | 36½ | 78½ | 88 | 14 | 20 |
| 13 | Begram | 20 M | 70 | 59 | 56 | 116 | 87 | 14 | 31 | 49 | 43½ | 92½ | 86 | 14 | 30 |
| 14 | Sumerchandra | 20 M | 70 | 52 | 52 | 104 | 98 | 14 | 36 | 48 | 47 | 110 | 93 | 15 | 27 |
| 15 | Chhatrasinh | 20 M | 66 | 54 | 54 | 103 | 54 | 10 | 26 | 49 | 45 | 94 | 42 | 13 | 20 |
| 16 | Rikhiram | 22 M | 69 | 50 | 53 | 103 | 54 | 10 | 26 | 49 | 45 | 94 | 42 | 11 | 30 |
| 17 | Pavansinh | 10 M | 71 | 50 | 59 | 119 | 80 | 13 | 32 | 50 | 52 | 102 | 80 | 11 | 35 |
| 18 | Jagdishprasad | 20 M | 66 | 40 | 45 | 85 | 54 | 12 | 31 | 42 | 36½ | 78½ | 65½ | 13 | 20 |
| 19 | Yaspal | 20 M | 66 | 54 | 53 | 107 | 58 | 14 | 21 | 43 | 42 | 85 | 65 | 13 | 20 |
| 20 | Jaypal | 25 M | 71 | 58 | 59 | 117 | 76 | 13 | 29 | 54 | 53 | 107 | 64 | 12 | 20 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | | | | | | | |
| 21 | Vishambar Dayal . . . | 18 | M | 71 | 58 | 53 | 111 | 76 | 12 | 31 | 59 | 59 | 118 | 85½ | 13 | 33 |
| 22 | Fulsinh . . . . . | 23 | M | 62 | 59 | 57 | 116 | 112 | 11 | 48 | 57 | 57 | 114 | 102 | 13 | 40 |
| 23 | Sadhuram II . . . . | 18 | M | 66 | 59 | 53 | 109 | 54 | 11 | 22 | 39½ | 35. | 74½ | 39¼ | 13 | 12 |
| 24 | Pitambarsinh . . . . | 21 | M | 72 | 56 | 57 | 113 | 73 | 12 | 30 | 59 | 57 | 116 | 66 | 11 | 30 |
| 25 | Hukumsinh . . . . | 19 | M | 70 | 58 | 56 | 114 | 40 | 10 | 21 | 52 | 52 | 104 | 33 | 10 | 15 |
| 26 | Bharatsinh . . . . | 19 | M | 68 | 54 | 54 | 108 | 56 | 11 | 23 | 50 | 50 | 110 | 70 | 13 | 30 |
| 27 | Sadhuram III . . . . | 20 | M | 72 | 56 | 58 | 115 | 68 | 12 | 28 | 58 | 56 | 114 | 79 | 13 | 30 |
| 28 | Vishambarsinhbhai . . . | 21 | M | 72 | 55 | 54 | 109 | 73 | 10 | 35 | 55 | 55 | 110 | 81½ | 11 | 35 |
| 29 | Dhansinh . . . . . | 22 | M | 70 | 56 | 55 | 111 | 96 | 12 | 39 | 46 | 41 | 87 | 64 | 12 | 26 |
| 30 | Parshuram . . . . . | 27 | M | 69 | 50 | 56 | 106 | 57 | 10 | 24 | 56 | 43 | 89 | 45 | 11 | 20 |
| 31 | Hanumanprasad . . . . | 20 | M | 68 | 58 | 58 | 116 | 142 | 14 | 52 | 48 | 47 | 95 | 126 | 12 | 45 |
| 32 | Madhoprasad . . . . | 19 | M | 71 | 57 | 59 | 116 | 78 | 11 | 38 | 52 | 56 | 108 | 83½ | 11 | 40 |
| 33 | Harischandra . . . . | 19 | M | 67 | 42 | 56 | 98 | 73 | 12 | 31 | 42 | 42 | 84 | 68 | 12 | 30 |
| 34 | Ilamchandra . . . . | 20 | M | 67 | 56 | 58 | 114 | 110 | 12 | 41 | 33 | 38 | 17 | 58 | 12 | 19 |
| 35 | Jaypraaash . . . . | 21 | M | 62 | 46 | 48 | 94 | 70 | 12 | 28 | 50 | 52 | 102 | 77 | 11 | 35 |
| 36 | Jagbahadur . . . . | 22 | M | 65 | 57 | 58 | 115 | 114 | 12 | 50 | 53 | 52 | 105 | 113 | 12 | 55 |
| 37 | Basdev . . . . . | 22 | M | 56 | 55 | 54 | 109 | 107 | 13 | 40 | 54 | 56 | 170 | 77 | 12 | 30 |
| 38 | Shersinh . . . . . | 20 | M | 49 | 52 | 54 | 106 | 79 | 13 | 38 | 60 | 58 | 118 | 78 | 12 | 27 |
| 39 | Durjey . . . . . | 21 | M | 43 | 56 | 56 | 112 | 79 | 11 | 36 | 60 | 58 | 118 | 110 | 13 | 40 |
| 40 | Raghuvirsinh . . . . | 23 | M | 66 | 42 | 42 | 84 | 60 | 12 | 24 | 56 | 55 | 111 | 75 | 12 | 30 |
| | TOTAL | | | | | | | | | | | | 3,975 | 2,945 | | |

Name of Parishramalaya : Muradabad. (U.P.)

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March to 27th March 56 | | | | | | From 28th March to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Total | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Shushilkumarbhai | 19 M | 94 | 52 | 52 | 104 | 62 | 14 | 11 | 62¼ | 52½ | 125 | 85 | 14 | 8 |
| 2 | Raghuvarsinh | 20 M | 94 | 38¾ | 40¾ | 79½ | 52 | 13 | 14 | 57½ | 50½ | 108 | 107 | 13 | 15 |
| 3 | Ram Avtar Singh | 18 M | 86 | 14¾ | 45 | 89¾ | 48 | 15 | 10 | 56½ | 52 | 108½ | 56½ | 15 | 11 |
| 4 | Shri Charansinh | 24 M | 67 | 18 | 14 | 32 | 12¾ | 13 | 1 | .. | 41 | .. | .. | .. | .. |
| 5 | M. Yamin | 20 M | 83 | 29½ | 30¾ | 60¼ | 53 | 20 | 10 | 38½ | 46½ | 85 | 60½ | 17 | 8 |
| 6 | Purshotam | 19 M | 11 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 7 | Rameshchandra | 18 M | 86 | 53 | 49½ | 102½ | 36 | 12 | 10 | 35 | 66½ | 101 | 61¾ | 13 | 17 |
| 8 | Jagdishprasad | 20 M | 94 | 86¼ | 86½ | 172¾ | 92 | 15 | 16 | 83¼ | 46¼ | 89¾ | 106 | 16 | 16 |
| 9 | Bhupalsinh | 19 M | 85 | 47½ | 41½ | 89 | 43½ | 13 | 13 | 47¼ | 46½ | 97 | 91 | 18 | 16 |
| 10 | Chandraswarup | 22 M | 92 | 44 | 45¾ | 89¾ | 60 | 13 | 13 | 46½ | 55 | 101½ | 78½ | 13 | 44 |
| 11 | Ganeshchandra | 20 M | 56 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 12 | Rameswarprasad | 22 M | 92 | 46 | 49½ | 95½ | 64 | 13 | 13 | 58½ | 59½ | 118 | 97 | 13 | 18 |
| 13 | Zarphanhusen | 20 M | 81 | 45½ | 49 | 94½ | 39½ | 13 | 7 | 63½ | 58½ | 122 | 65 | 15 | 10 |
| 14 | Om Prakash Sharma I | 20 M | 70 | 47½ | 48½ | 96 | 43 | 12 | 9 | .. | .. | .. | .. | .. | .. |
| 15 | Devidas Varma | 20 M | 89 | 47½ | 45½ | 89 | 60 | 14 | 17 | 50¾ | 50¾ | 101½ | 50 | 14 | 16 |
| 16 | Rajendraprasad | 21 M | 91 | 49 | 49 | 98 | 14 | 14 | 10 | 54 | 55¾ | 109¾ | 76½ | 15 | 12 |
| 17 | Rampalsinh | 20 M | 91 | 52¾ | 42½ | 95¼ | 66 | 12 | 16 | 45¾ | 49½ | 95¼ | 87½ | 13 | 16 |
| 18 | Jirajsinh | 19 M | 84 | 45¾ | 48 | 93½ | 45½ | 13 | 8 | 54 | 67 | 121 | 67½ | 14 | 8 |
| 19 | M. Yusaf | 18 M | 82 | 33½ | 36½ | 70 | 39 | 14 | 8 | 24¼ | 53½ | 77¾ | 50 | 13½ | 10 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | | | | | | | |
| 20 | M. Nazar | 20 | M | 90 | 49½ | 49½ | 99 | 60 | 12 | 16 | 59½ | 101 | 100½ | 101 | 12½ | 20 |
| 21 | Harishchandra | 24 | M | 91 | 43½ | 43 | 86½ | 41 | 14 | 8 | 63 | 53 | 110 | 51½ | 15½ | 9 |
| 22 | Om Prakash | 25 | M | 92 | 48½ | 47½ | 96 | 43 | 14 | 11 | 65½ | 57½ | 114 | 94¾ | 14 | 14 |
| 23 | Chhotesinh | 20 | M | 89 | 49 | 46 | 95 | 68 | 13 | 14 | 53½ | 53 | 106½ | 11½ | 14 | 14 |
| 24 | Ramkumar | 22 | M | 16 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 25 | Rameshchandra | 22 | M | 89 | 40½ | 49 | 89½ | 16½ | 13 | 11 | 65¾ | 51 | 117½ | 87 | 13½ | 14 |
| 26 | Shantiswarup | 20 | M | 89 | 44½ | 39½ | 83¾ | 27 | 13 | 5 | 55¾ | 47¾ | 93 | 26½ | 13 | 6 |
| 27 | Yagnadatt | 19 | M | 87 | 43½ | 37½ | 81 | 46 | 13 | 9 | 53½ | 56 | 106½ | 81 | 13 | 11 |
| 28 | Pruthvisinh | 20 | M | 88 | 35 | 41 | 76 | 58 | 13 | 12 | 44 | 49 | 93 | 77 | 14 | 14 |
| 29 | Harprasad | 21 | M | 81 | 46 | 41½ | 87½ | 34½ | 14 | 7 | 55¾ | 51¾ | 107½ | 46 | 15½ | 7 |
| 30 | Yagneshwar | 19 | M | 89 | 39 | 41½ | 80½ | 40 | 14 | 8 | 53½ | 55½ | 109 | 76 | 15 | 10 |
| 31 | Mishrisinh | 20 | M | 89 | 41½ | 44 | 85½ | 69 | 14 | 13 | 48 | 51 | 99 | 77 | 15 | 14 |
| 32 | Makardhvaj Tyagi | 28 | M | 83 | 42 | 57 | 79 | 53 | 13 | 10 | 43½ | 49 | 92½ | 70½ | 13½ | 13 |
| 33 | Samiullah | 21 | M | 80 | 41 | 38 | 79 | 34 | 14 | 7 | 37½ | 37½ | 75 | 99½ | 13½ | 11 |
| 34 | Ramsinh | 22 | M | 73 | 48½ | 49½ | 98 | 80 | 13 | 14 | 56 | 56½ | 112½ | 81 | 14 | 14 |
| 35 | Rampal Singh | 19 | M | 74½ | 42½ | 43 | 85½ | 69 | 14 | 13 | 51½ | 54 | 105½ | 57 | 14 | 12 |
| 36 | Dilip Singh | 20 | M | 74 | 51 | 40 | 991 | 61½ | 13 | 12 | 58 | 54 | 112 | 77½ | 15 | 13 |
| 37 | Amar Singh | 20 | M | 74 | 45 | 52 | 97 | 63 | 13 | 16 | 51 | 66½ | 117½ | 88 | 14 | 19 |
| 38 | Indrapal Singh | 25 | M | 67 | 46½ | 45½ | 92¼ | 58 | 15 | 13 | 52½ | 51½ | 104 | 93 | 14 | 13 |
| 39 | Karansingh | 20 | M | 72 | 46 | 49 | 95 | 48 | 14 | 10 | 54 | 68 | 122 | 87 | 14 | 15 |
| 40 | Jairam Sharma | 20 | M | 72 | 48½ | 51 | 99½ | 68 | 18 | 12 | 51½ | 58½ | 110 | 87½ | 15 | 13 |
| 41 | Nihal Singh | 20 | M | 72 | 50¾ | 46 | 96¼ | 46 | 14 | 8 | 61¼ | 58¼ | 120 | 52½ | 14 | 9 |
| 42 | Devindra Prasad | 20 | M | 73 | 49 | 50 | 99 | 72 | 13 | 16 | 57½ | 64¾ | 122 | 95 | 14 | 18 |
| 43 | Jayprakash | 22 | M | 67 | 40 | 45 | 85 | 39¾ | 12 | 8 | 55½ | 53 | 108½ | 50½ | 13 | 9 |
| 44 | Pritam Singh | 21 | M | 65 | 45½ | 40 | 85¼ | 53 | 13 | 12 | 59¾ | 61½ | 121 | 80 | 14 | 14 |
| 45 | Satyaprakash | 19 | M | 43 | 8 | 8 | 16 | 2 | 12 | 1 | .. | .. | .. | .. | .. | .. |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | Pura Singh | 22 | M | 79 | 48 | 48 | 96 | 39½ | 10 | 9 | 68 | 68 | 136 | 38½ | 12 | 9 |
| 47 | Sobha Singh | 19 | M | 49 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Tejram Bhai | 20 | M | 75 | 46 | 49 | 95 | 42 | 10 | 14 | 68 | 68 | 136 | 86 | 11 | 16 |
| 49 | Champatram | 30 | M | 79 | 48 | 48 | 96 | 53 | 10 | 16 | 98 | 98 | 196 | 84½ | 11 | 21 |
| 50 | Vijayilal | 22 | M | 79 | 76½ | 49½ | 126 | 46 | 11 | 12 | 98 | 98 | 113½ | 121½ | 12 | 24 |
| 51 | Bhimsen | 21 | M | 79 | 48 | 48 | 96 | 62 | 10 | 14 | 98 | 98 | 196 | 52½ | 12 | 15 |
| 52 | Shivnarayan | 19 | M | 74 | 46 | 50 | 96 | 34 | 8 | 12 | 98 | 98 | 196 | 71 | 10 | 16 |
| 53 | Totaram | 22 | M | 77 | 48 | 48 | 96 | 54½ | 11 | 11 | 98 | 98 | 196 | 64½ | 11 | 12 |
| 54 | Jagan Singh | 25 | M | 77 | 48 | 48 | 96 | 86 | 13 | 15 | 98 | 98 | 196 | 130 | 12 | 32 |
| 55 | Premraj | 29 | M | 75 | 47 | 49 | 96 | 67 | 10 | 16 | 98 | 98 | 196 | 104¾ | 10 | 30 |
| 56 | Raghuvir Sharan | 29 | M | 76 | 76 | 48 | 124 | 62½ | 10 | 14 | 98 | 98 | 196 | 114 | 10 | 19 |
| 57 | Sureshchandae III | 19 | M | 79 | 46½ | 48½ | 95 | 37¾ | 8 | 11 | 98 | 98 | 196 | 73 | 9 | 18 |
| 58 | Ramesh Chandae III | 19 | M | 75 | 48 | 48 | 96 | 53 | 9 | 16 | 98 | 98 | 196 | 84 | 9 | 16 |
| 59 | Ramnivas I | 21 | M | 74 | 50 | 46 | 96 | 18 | 8 | 6 | 98 | 98 | 196 | 39½ | 9 | 8 |
| 60 | Bhudev Sharma | 25 | M | 75 | 48 | 48 | 96 | 53½ | 8 | 16 | 98 | 98 | 196 | 53½ | 10 | 16 |
| 61 | Ramprasad | 25 | M | 73 | 47¾ | 48½ | 96 | 58½ | 8½ | 15 | 86 | 86 | 136 | 67 | 10 | 15 |
| 62 | Kunversinh | 21 | M | 75 | 42 | 48 | 96 | 52½ | 8½ | 13 | 98 | 98 | 196 | 77 | 9½ | 17 |
| 63 | Ramnivas | 21 | M | 75 | 42 | 54 | 96 | 36½ | 10 | 8 | 68 | 68 | 136 | 19½ | 10 | 9 |
| 64 | Kishorlal | 21 | M | 75 | 46 | 49 | 95 | 46 | 10 | 13 | 68 | 68 | 136 | 82½ | 11 | 17 |
| 65 | Maheshbabu | 20 | M | 8 | | | | | | | | | | | | |
| 66 | Arjunrao | 29 | M | 71 | 41 | 55 | 96 | 21½ | 9 | 5 | 68 | 68 | 136 | 45½ | 12 | 9 |
| 67 | Mahendrasinh | 20 | M | 60 | 36½ | 59½ | 96½ | 33 | 10 | 6 | 60 | 60 | 120 | 27 | 13 | 6 |
| 68 | Sitaram | 19 | M | 98 | 45 | 41 | 86 | 49½ | 10 | 11 | 68 | 68 | 136 | 71½ | 14 | 11 |
| 69 | Hukumsinh | 18 | M | 31 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 70 | Badamsingh | 18 | M | 31 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 71 | Todiram | 26 | M | 64 | 40 | 56 | 96 | 37¾ | 9 | 9 | 66¾ | 16½ | 128 | 18 | 10 | 7 |
| 72 | Thankurdas | 20 | M | 63 | 42 | 55 | 97 | 47 | 9 | 12 | 68 | 68 | 136 | 31 | 10 | 8 |
| 73 | Haribhajansingh | 29 | M | 65 | 47 | 49 | 96 | 40½ | 10 | 8 | 68 | 68 | 136 | 68 | 14½ | 9 |
| 74 | Bhismpal | 19 | M | 66 | 43 | 53 | 96 | 39½ | 9 | 12 | 68 | 68 | 136 | 67 | 10 | 16 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 75 | Shishupal | 18 M | 19 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 76 | Ramashanker | 19 M | 67 | 57 | 59 | 115 | 42½ | 9 | 13 | 68 | 68 | 136 | 62 | 11 | 14 |
| 77 | Ram Avtar | 18 M | 33 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 78 | Amarsingh | 20 M | 67 | 42 | 54 | 96 | 34½ | 10 | 6 | 68 | 68 | 136 | 40 | 10 | 7 |
| 79 | Kishanlal | 20 M | 19 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 80 | Ram Macheslal | 18 M | 29 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 81 | Raghuvir Saran | 19 M | 59 | 42½ | 53½ | 96 | 49½ | 9 | 11 | 68 | 68 | 136 | 56½ | 12 | 12 |
| 82 | Vireshvi Prasad | 19 M | 30 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 83 | Lalitaprasad | 22 M | 10 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 84 | Raghuvir singh | 20 M | 57 | 46 | 49 | 95 | 51½ | 9 | 14 | 68 | 68 | 136 | 55½ | 10 | 14 |
| 85 | Omprakash | 20 M | 53 | 45 | 51 | 96 | 58 | 9 | 15 | 68 | 68 | 136 | 65½ | 10 | 16 |
| 86 | Kedarsingh | 20 M | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 8,961 | 4,886 |  |  |

Name of Parishramalaya : BIJNAUR, Jain Dharamshala Distt. Bijnaur (U.P.)

Number of Charkha sets :

| S. No. | Name of Operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28 March 56 to 13 April 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours). | | | | | |
| | | | | Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Sri Vidyasagar Bhai | 20 M | 79 | 48½ | 46½ | 95 | 86 | 13 | | 42 | 43 | 85 | 72 | 13 | |
| 2 | Sri Jayprakash Bhai | 25 M | 73 | 53½ | 57 | 110½ | 81½ | 13 | | 49 | 50½ | 99½ | 91 | 13 | |
| 3 | Sri Radyanand | 21 M | 81 | 50½ | 51 | 101½ | 61 | 13 | | 55 | 55 | 110 | 82 | 13 | |
| 4 | Sri Rajpalbhai | 22 M | 80 | 55 | 54½ | 109½ | 94 | 12 | | 53 | 54 | 107½ | 100 | 42 | |
| 5 | Sri Rashajitbhai | 20 M | 81 | 58 | 59 | 117 | 131 | 12 | | 66 | 50 | 116 | 109 | 12 | |
| 6 | Sri Chandanbhai | 19 M | 81 | 51½ | 59 | 110½ | 96 | 16 | | 56 | 56 | 112 | 104 | 16 | |
| 7 | Sri Damodar | 23 M | 79 | 51½ | 47 | 98½ | 91½ | 13 | | 49 | 50½ | 99½ | 91 | 13 | |
| 8 | Sri Rampal | 20 M | 79 | 57 | 52½ | 109½ | 82 | 12 | | 54 | 52½ | 106½ | 81 | 12 | |
| 9 | Sri Jayaprakash | 20 M | 73 | 46 | 43 | 89 | 90 | 11 | | 26 | 27½ | 53½ | 35 | 11 | |
| 10 | Sri Giriraj | 22 M | 74 | 58½ | 58 | 116½ | 90 | 13 | | 40 | 36 | 76 | 50 | 13 | |
| 11 | Sri Bishanlal | 21 M | 81 | 44½ | 47½ | 90½ | 80 | 13 | | 47½ | 50½ | 97½ | 60 | 13 | |
| 12 | Sri Vasanlal | 20 M | 79 | 43 | 47½ | 90½ | 80 | 13 | | 47½ | 50 | 97½ | 60 | 13 | |
| 13 | Sri Mavani | 21 M | 75 | 51 | 56½ | 107¾ | 120 | 12 | | 32½ | 32 | 64½ | 42 | 12 | |
| 14 | Sri Chandraprakash | 21 M | 80 | 57 | 57½ | 114½ | 66 | 13 | | 60 | 57½ | 117½ | 79¾ | 13 | |
| 15 | Sri Ramprasad | 20 M | 77 | 50 | 53 | 103 | 80 | 11 | | 50 | 48 | 98 | 70 | 11 | |
| 16 | Sri Santram | 22 M | 81 | 51 | 51 | 102 | 117 | 15 | | 50 | 46 | 96 | 116 | 15 | |
| 17 | Sri Jagansingh | 22 M | 75 | 42 | 56 | 98 | 63 | 12 | | 44½ | 49½ | 94 | 66 | 12 | |
| 18 | Sri Abdulrahman | 22 M | 81 | 52½ | 52½ | 105 | 63 | 12 | | 58½ | 52½ | 111 | 94 | 12 | |
| 19 | Sri Satyaprakash | 20 M | 79 | 51 | 55 | 106 | 83 | 12 | | 48½ | 41 | 89½ | 75 | 12 | |
| 20 | Sri Hardoo | 20 M | 78 | 57 | 58 | 115 | 90 | 14 | | 51 | 47 | 98 | 73 | 14 | |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | | | | | | | |
| 21 | Sri Lilasingh | 22 | M | 79 | 52½ | 52½ | 105 | 115 | 11 | | 49½ | 38 | 87½ | 111 | 11 | |
| 22 | Sri Ram Kishore | 23 | M | 79 | 60 | 52½ | 115½ | 80 | 12 | | 58½ | 49 | 107½ | 75 | 12 | |
| 23 | Sri Sammusingh | 23 | M | 79 | 53½ | 52½ | 106 | 72 | 13 | | 50 | 44½ | 94½ | 80 | 13 | |
| 24 | Sri Bhopalsingh | 21 | M | 77 | 51 | 50 | 101 | 94 | 14 | | 51 | 56 | 107 | 91 | 14 | |
| 25 | Sri Sagarsingh | 21 | M | 75 | 54½ | 49 | 103½ | 80 | 14 | | 58 | 44½ | 102½ | 84 | 14 | |
| 26 | Sri Hari Dutt | 20 | M | 77 | 56 | 56½ | 112½ | 100 | 15 | | 55½ | 153 | 108½ | 107 | 14 | |
| 27 | Sri Dharamsingh | 20 | M | 78 | 52½ | 53½ | 106 | 91 | 12 | | 51½ | 53 | 104½ | 85 | 12 | |
| 28 | Sri Hukamsingh | 25 | M | 76 | 58½ | 56¼ | 115¼ | 85 | 13 | | 59¼ | 56½ | 115¾ | 98 | 13 | |
| 29 | Sri Budhri Prakash | 20 | M | 81 | 49 | 48¼ | 97½ | 12 | 12 | | 53 | 53 | 106 | 86 | 12 | |
| 30 | Sri Satya Prakash | 20 | M | 81 | 53 | 49½ | 102½ | 102 | 14 | | 54 | 52½ | 106½ | 100 | 13 | |
| 31 | Sri Balbirsingh | 22 | M | 81 | 59 | 57 | 116 | 91 | 14 | | 60 | 58 | 118 | 99 | 12 | |
| 32 | Sri Dineshchandra | 20 | M | 73 | 56¼ | 58¼ | 115½ | 85 | 13 | | 44 | 46 | 90 | 77 | 14 | |
| 33 | Sri Radheshyam | 20 | M | 77 | 57 | 57 | 114 | 76 | 16 | | 56 | 60 | 116 | 91 | 14 | |
| 34 | Sri Devindrasingh | 20 | M | 78 | 53½ | 52½ | 106 | 88 | 16 | | 56 | 55 | 111 | 97 | 11 | |
| 35 | Sri Narashchandra | 22 | M | 77 | 55 | 58 | 113 | 92 | 14 | | 55 | 58 | 113 | 82 | 13 | |
| 36 | Sri Mangasingh | 22 | M | 78 | 51¼ | 51¼ | 103½ | 61 | 13 | | 51 | 54 | 105 | 79 | 10 | |
| 37 | Sri Bhagirath | 22 | M | 81 | 56 | 53¼ | 109¼ | 90 | 13 | | 60 | 60 | 120 | 100 | 13 | |
| 38 | Sri Krushirambhai | 24 | M | 62 | 50 | 49 | 99 | 53 | 12 | | 45 | 46¼ | 81¼ | 45 | 14 | |
| 39 | Sri Nareshchandra | 19 | M | 64 | 45 | 43 | 88 | 89 | 10 | | 49 | 44 | 94 | 84 | 13 | |
| 40 | Sri Pravin | 21 | M | 68 | 60 | 59 | 119 | 78 | 12 | | 45 | 43 | 88 | 80 | 16 | |
| 41 | Sri Bharatsingh | 20 | M | 67 | 48¾ | 44 | 9¼ | 56 | 10 | | 44 | 44 | 88 | 56 | 14 | |
| 42 | Sri Umrao | 22 | M | 65 | 56½ | 56½ | 122½ | 88 | 11 | | 46½ | 46 | 92½ | 99 | 14 | |
| 43 | Sri Krishnabhai | 20 | M | 65 | 51 | 48 | 99 | 63 | 11 | | 46½ | 65 | 102¼ | 58 | 13 | |
| 44 | Sri Balkaran | 22 | M | 59 | 48¼ | 48½ | 97¼ | 92 | 12 | | 36 | 39 | 75 | 84 | 15 | |
| 45 | Sri Nirmalbhai | 19 | M | 64 | 54 | 50½ | 105½ | 92 | 12 | | 46 | 44 | 90 | 84 | 15 | |
| 46 | Sri Manoharlalbhai | 19 | M | 66 | 52 | 53 | 105 | 73 | 12 | | 51 | 53 | 104 | 68 | 14 | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | Sri Ramavatar | 20M | 66 | 55 | 53 | 108 | 75 | 11 | 46 | 59 | 105 | 78 | 13 |
| 48 | Sri Puranbhai | 22M | 64 | 48½ | 46½ | 95 | 86 | 12 | 46½ | 44½ | 91 | 78 | 13 |
| 49 | Sri Vachaspati | 20M | 62 | 29½ | 32 | 61½ | 60 | 15 | 51 | 46 | 97 | 92 | 18 |
| 50 | Sri Sirendrabhai | 19M | 55 | 51 | 46 | 97 | 75 | 10 | 42½ | 40 | 82½ | 87 | 14 |
| 51 | Sri Khyamewarup bhai | 20M | 58 | 42 | 40½ | 82½ | 75 | 12 | 55 | 45 | 100 | 63 | 13 |
| 52 | Sri Jaymal | 21M | 61 | 35¼ | 46 | 81½ | 56 | 13 | 42½ | 54 | 96½ | 73 | 14 |
| 53 | Sri Manavirbhai | 22M | 62 | 60 | 56½ | 116½ | 62 | 9 | 58 | 46 | 104 | 75 | 18 |
| 54 | Sri Haridutt | 24M | 59 | 48 | 46 | 94 | 58 | 12 | 46 | 57 | 103 | 55 | 11 |
| 55 | Sri Devisingh | 22M | 60 | 60 | 55 | 115 | 106 | 11 | 59 | 46 | 105 | 87 | 14 |
| 56 | Sri Mahipal | 19M | 58 | 45½ | 55 | 100½ | 79 | 14 | 47½ | 51 | 98½ | 72 | 13 |
| 57 | Sri Mugvant | 20M | 64 | 50½ | 49½ | 99¼ | 73 | 11 | 40 | 36½ | 76½ | 66 | 12 |
| 58 | Sri Rajpal | 21M | 61 | 51 | 54½ | 105½ | 75 | 13 | 51 | 50½ | 101½ | 76 | 14 |
| 59 | Sri Radheshyam | 19M | 61 | 56 | 56½ | 102½ | 52 | 10 | 38 | 38½ | 76½ | 56 | 10 |
| 60 | Ram Kumar | 20M | 56 | 52½ | 48 | 100½ | 64 | 10 | 39 | 33 | 72 | 40 | 12 |
| 61 | Jaswant | 21M | 50 | 38 | 38 | 76 | 35 | 10 | 38½ | 35½ | 64 | 74 | 12 |
| 62 | Dialbihari | 19M | 58 | 48 | 48¼ | 99½ | 71 | 11 | 55½ | 49½ | 105 | 63 | 10 |
| 63 | Hari Singh | 25M | 58 | 49 | 51 | 100 | 70 | 11 | 43 | 36 | 89 | 69 | 13 |
| 6 | Rohilal | 22M | 50 | 35 | 47 | 92 | 69 | 10 | 39½ | 37½ | 77 | 42 | 14 |
| 65 | Babu Ram | 19M | 57 | 38½ | 49 | 97½ | 75 | 10 | 58 | 34 | 92 | 78 | 1 |
| 66 | Data Ram | 20M | 64 | 57 | 53½ | 100½ | 64 | 10 | 45 | 45 | 90 | 62 | 15 |
| 67 | Teek Chander | 21M | 57 | 59½ | 49 | 108½ | 81 | 10 | 55½ | 55½ | 111 | 54 | 14 |
| 68 | Sham Singh | 20M | 58 | 60 | 55 | 115 | 72 | 10 | 58 | 57 | 115 | 78 | 14 |
| 69 | Chander Pal | 21M | 53 | 57 | 55 | 112 | 72 | 11 | 53 | 53 | 106 | 71 | 14 |
| 70 | Ram Kumar | 20F | 33 | 46 | 46 | 92 | 67 | 11 | 18 | 18 | 37 | 23 | 14 |
| 71 | Jagdish | 30M | 55 | 60 | 59 | 119 | 72 | 12 | 58 | 55 | 117 | 78 | 12 |
| 72 | Ram Gopal | 19M | 51 | 50 | 51½ | 110½ | 68 | 10 | 56 | 49 | 105 | 75 | 15 |
| 73 | Kundan | 25M | 52 | 51¾ | 50¼ | 102 | 62 | 10 | 46¼ | 45 | 92¼ | 69 | 15 |
| 74 | Sita Ram | 22M | 37 | 57 | 55 | 112 | 69 | 10 | 55 | 53 | 108 | 51 | 13 |
| 75 | Naresh | 10M | 50 | 39 | 48½ | 87½ | 76 | 12 | 56 | 53 | 109 | 66 | 15 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 76 | Raj | 23 M | 49 | 47 | 46 | 93 | 83 | 14 |  | 25 | 25 | 25 | 32 | 14 |  |
| 77 | Peer Mal | 22 M |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 78 | Rameswer | 20 M |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 79 | Kaushi Pal | 19 M |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80 | Termeshwent |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | TOTAL |  |  |  |  |  |  |  |  |  | 7317 | 5771 |  |  |  |

Name of Parishramalaya : SIMARI Madhubani (Bihar)

No. of charkha sets: 24

Date of starting : 8-1-56

| S. No | Name of Spinner | Class of Spinner | No. of days of trg. | From 10th March, 56 to 27th March, 56 | | | | | | From 28th March, 56 to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding. | Spg. | Total | Production hanks | Count | Loss Tolas | Carding | Spg. | Total | Production hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Seheshwar Jha | 24 M | 77 | 45 | 52 | 97 | 104½ | 20 | 31¼ | 36 | 36 | 72 | 65½ | 20 | 15 |
| 2 | Yogeshwar Mahto | 25 M | 79 | 36 | 36 | 72 | 79 | 16 | 43 | 56 | 56 | 112 | 108 | 9 | 31½ |
| 3 | Kusheshwar Thakur | 30 M | 84 | 46 | 56 | 102 | 109 | 20 | 31¼ | 60 | 60 | 120 | 200 | 16 | 47 |
| 4 | Liladhar Jha | 30 M | 79 | 54 | 45 | 99 | 72½ | 16 | 26¼ | 64 | 56 | 120 | 69½ | 20 | 20 |
| 5 | Ramkhelvan Mehta | 24 M | 80 | 37 | 34 | 71 | 74 | .. | 42 | 60 | 60 | 120 | 111 | 16 | 10½ |
| 6 | Markande Jha | 20 M | 83 | 54 | 59 | 113 | 126½ | .. | 49 | 60 | 60 | 120 | 173½ | 20 | 45 |
| 7 | T. Thakur | 28 M | 84 | 44 | 47 | 91 | 98 | .. | 31¼ | 64 | 56 | 120 | 95 | 16 | 25 |
| 8 | Shobhakant Thakur | 21 M | 84 | 51 | 45 | 96 | 75 | 14 | 30 | 60 | 60 | 120 | 83 | 16 | 25 |
| 9 | Hajari Mehta | 21 M | 84 | 54 | 54 | 108 | 129 | 20 | 43 | 60 | 60 | 120 | 132 | 9 | 35 |
| 10 | Rameshwar Mehta | 24 M | 84 | 54 | 54 | 108 | 129 | .. | 41¼ | 60 | 60 | 120 | 133 | 9 | 35 |
| 11 | Baldev Yadav | 18 M | 83 | 50 | 50 | 100 | 97½ | 16 | 33 | 56 | 56 | 112 | 106 | 16 | 30 |
| 12 | Ramswarup Mehta | 19 M | 83 | 50 | 50 | 100 | 97½ | .. | 33¼ | 56 | 56 | 112 | 107 | 16 | 30 |
| 13 | Bhagirath Jha | 22 M | 84 | 44 | 59 | 103 | 126½ | 20 | 30 | 60 | 60 | 120 | 167½ | 20 | 45 |
| 14 | Asrafi Yadav | 21 M | 83 | 44 | 49 | 93 | 96½ | 16 | 49¾ | 60 | 60 | 120 | 97½ | 16 | 25 |
| 15 | Kapileshwar Malli | 24 M | 63 | 45 | 42 | 87 | 56 | 12 | 23¾ | 60 | 60 | 120 | 64 | 14 | 20 |
| 16 | Saukhi Yadav | 28 M | 84 | 49 | 56 | 105 | 106 | 25 | 16¾ | 60 | 60 | 120 | 115½ | 25 | 30 |

| 1 | 2 | 3 Age Sex | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Jagdev Yadav | 25 M | 84 | 49 | 56 | 105 | 106 | .. | 17 | 60 | 60 | 120 | 115½ | 25 | 30 |
| 18 | Ugra nath Jha | 23 M | 83 | 55 | 54 | 109 | 77 | 20 | 16½ | 56 | 56 | 112 | 87 | 25 | 25 |
| 19 | Suryanaran Jha | 30 M | 84 | 53 | 54 | 107 | 81 | 20 | 22½ | 60 | 60 | 120 | 83 | 20 | 25 |
| 20 | Kamalkant Jha | 18 M | 83 | 49 | 38 | 88 | 65 | 14 | 30 | 60 | 60 | 120 | 120 | 14 | 40 |
| 21 | Vrijkishore Jha | 23 M | 84 | 48 | 51 | 99 | 65 | 20 | 11½ | 60 | 60 | 120 | 60½ | 20 | 15 |
| 22 | Sitaram Jha | 25 M | 84 | 48 | 51 | 99 | 64 | .. | 10 | 64 | 56 | 120 | 58½ | 9 | 15 |
| 23 | Chandranarayan Mishra | 22 M | 81 | 46 | 40 | 86 | 49 | 16 | 15 | 64 | 56 | 120 | 62 | 20 | 20 |
| 24 | Rajendra Mishra | 18 M | 84 | 51 | 53 | 104 | 68 | .. | 30 | 60 | 60 | 120 | 108 | 16 | 35 |
| 25 | Yogeshwar Yadav | 25 M | 83 | 56 | 44 | 100 | 51½ | 25 | 20 | 64 | 56 | 120 | 108½ | 25 | 28 |
| 26 | Sinheshwar Yadav | 22 M | 77 | 44 | 44 | 88 | 51½ | 25 | 20 | 60 | 60 | 120 | 120½ | 25 | 32 |
| 27 | Abudhnanarayan Dass | 24 M | 73 | 43 | 29 | 72 | 36½ | 14 | 12 | 40 | 40 | 80 | 44 | 16 | 15 |
| 28 | Laxmikant Dass | 22 M | 68 | 49 | 35 | 84 | 44½ | 14 | 18 | 44 | 44 | 88 | 34 | 16 | 15 |
| 29 | Abhaykumar Dass | 20 M | 63 | 48 | 41 | 89 | 51½ | 12 | 12 | 4 | 4 | 8 | 3 | 16 | 2 |
| 30 | Yogendra Jha | 19 M | 75 | 52 | 45 | 97 | 56½ | 12 | 13 | 28 | 28 | 56 | 29 | 16 | 8 |
| 31 | Baualal P. | 18 M | 70 | 27 | 24 | 51 | 28 | 12 | 11½ | 28 | 28 | 56 | 21 | 16 | 10 |
| 32 | U. Chaudhary | 24 M | 84 | 57 | 48 | 105 | 76½ | 16 | 32½ | 60 | 60 | 120 | 72½ | 20 | 25 |
| 33 | Premlal Mishra | 20 M | 77 | 35 | 28 | 63 | 44 | 16 | 16½ | 60 | 60 | 120 | 68 | 20 | 15 |
| 34 | Laxmikant Jha | 31 M | 78 | 46 | 38 | 84 | 57 | 14 | 25 | 44 | 44 | 88 | 59 | 16 | 20 |
| 35 | Sushila Devi | 20 F | 84 | 59 | 53 | 112 | 113½ | 20 | 48½ | 60 | 60 | 120 | 146 | 20 |  |
| 36 | Bhivikiya | 25 M | 84 | 48 | 47 | 95 | 74½ | 16 | 31½ | 60 | 60 | 120 | 76 | 16 | 20 |
| 37 | Mudrika Devi | 25 F | 83 | 58 | 42 | 100 | 64 | 14 | 35 | 60 | 60 | 120 | 79 | 16 | 30 |
| 38 | Janki Devi | 30 F | 84 | 56 | 54 | 110 | 92 | 14 | 32½ | 64 | 56 | 120 | 106 | 16 | 35 |
| 39 | Savitri Devi | 30 F | 83 | 44 | 34 | 78 | 43 | 14 | 28½ | 60 | 60 | 120 | 49 | 16 | 15 |
| 40 | Nagadamba Devi | 33 F | 84 | 66 | 46 | 112 | 115 | 14 | 47½ | 60 | 60 | 120 | 132 | 16 | 40 |
| 41 | Gujeshwari Devi | 32 F | 84 | 60 | 45 | 105 | 93½ | 14 | 25 | 60 | 60 | 120 | 101½ | 20 | 30 |
| 42 | Subadhi Devi | 35 F | 84 | 60 | 45 | 105 | 93½ | 14 | 25 | 60 | 60 | 120 | 101½ | 20 | 39 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43 | Jay Devi | 30 F | 81 | 53 | 49 | 102 | 75 | 20 | 20 | 56 | 56 | 112 | 79 | 20 | 25 |
| 44 | Sebji Devi | 25 F | 84 | 48 | 46 | 94 | 79½ | 20 | 18 | 60 | 60 | 120 | 101 | 20 | 25 |
| 45 | Rasmati Devi | 24 F | 84 | 46 | 45 | 91 | 61½ | 20 | 13½ | 60 | 60 | 120 | 95 | 25 | 20 |
| 46 | Munte Tanti | 20 F | 62 | 53 | 49 | 102 | 75 | 20 | 20 | 60 | 60 | 120 | 85 | 20 | 25 |
| 47 | Elias | 20 F | 61 | 50 | 48 | 98 | 84 | 16 | 22½ | 48 | 48 | 96 | 69 | 16 | 20 |
| 48 | S. Chuliam | 25 F | 62 | 50 | 48 | 98 | 84 | 16 | 22½ | 56 | 56 | 112 | 69 | 16 | 20 |
| 49 | Bajni Devi | 25 F | 18 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 50 | Malikant Jha | 20 M | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | 5256 | 4366 | | |

Name of Parishramalaya : Hajipur,
Post: Samaila Lal Ganj, Madhubani (Bihar)

No. of Charkha Sets : 20

| S. No. | Name of spinner | Class of Spinner | No. of days. of trg. | From 10/3/56 to 27/3/56 |  |  |  |  |  | From 28/3/56/ to 13/4/56 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration or work ( Hours) |  |  |  |  |  |
|  |  |  |  | Carding | Spg. | Total | Production hanks | Count | Loss Tolas | Carding | Spg. | Total | Production hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Ramvilas P. Sinh | 17 M | 83 | 45 | 45 | 90 | 45 | 16 | 15 | 45 | 45 | 90 | 79 | 16 | 22½ |
| 2 | Surendra P. Sinh | 18 M | 83 | 45 | 45 | 90 | 45 | 16 | 15 | 45 | 45 | 90 | 79 | 16 | 22½ |
| 3 | Padmakar Mishra | 22 M | 83 | 45 | 45 | 90 | 55 | 16 | 17½ | 46 | 44 | 90 | 56 | 15 | 15 |
| 4 | Mustak Ahmed | 27 M | 82 | 45 | 45 | 90 | 55 | 16 | 17½ | 46 | 44 | 90 | 56 | 15 | 15 |
| 5 | Laxmikant Bhagat | 22 M | 83 | 45 | 45 | 90 | 119 | 16 | 35 | 47 | 43 | 90 | 69 | 12 | 20 |
| 6 | Nagindra P. Sinh | 17 M | 70 | 18 | 16 | 36 | 23 | 15 | 7½ | 33 | 33 | 40 | 40 | 10 | 10 |
| 7 | Ramjiven Mishra | 23 M | 82 | 45 | 45 | 90 | 45 | 16 | 15 | 45 | 45 | 90 | 84 | 14 | 23 |
| 8 | Gangadev Jha | 22 M | 80 | 45 | 45 | 90 | 67 | 14 | 20 | 33 | 33 | 66 | 58 | 16 | 15 |
| 9 | Chiranjiv Mishra | 29 M | 82 | 45 | 45 | 90 | 66 | 14 | 30 | 45 | 45 | 90 | 73 | 13 | 25 |
| 10 | Ganesh Bhagat | 23 M | 82 | 45 | 45 | 90 | 66 | 14 | 20 | 45 | 45 | 90 | 63 | 12 | 24 |
| 11 | Laxmi Sadu | 18 M | 83 | 45 | 45 | 90 | 60 | 14 | 17½ | 45 | 45 | 90 | 96 | 12 | 30 |
| 12 | Ramvilas Pajiar | 20 M | 83 | 45 | 45 | 90 | 75 | 14 | 22½ | 45 | 45 | 90 | 69 | 12 | 21 |
| 13 | Yogendra P. Shah | 18 M | 83 | 45 | 45 | 90 | 68 | 14 | 20 | 45 | 45 | 90 | 105 | 12 | 35 |
| 14 | Ram P. Shah | 21 M | 50 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 15 | Ramnarayan Shah | 25 M | 81 | 45 | 45 | 90 | 76 | 14 | 25 | 45 | 45 | 90 | 106 | 12 | 34 |
| 16 | Sukhdev Sinh | 30 M | 79 | 45 | 45 | 90 | 51 | 56 | 15 | 46 | 45 | 90 | 126 | 16 | 40 |
| 17 | Yogendra Mandal | 22 M | 80 | 45 | 45 | 90 | 45 | 16 | 15 | 46 | 44 | 90 | 109 | 16 | 31 |
| 18 | Laldhari Mandal | 28 M | 73 | 45 | 45 | 90 | 45 | 16 | 15 | 42 | 36 | 78 | 99 | 16 | 30½ |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Raghunath Mandal | 22 M | 83 | 45 | 45 | 90 | 88 | 18 | 22½ | 45 | 45 | 90 | 69 | 16 | 46 |
| 20 | Ramavtar Mandal | 25 M | 83 | 45 | 45 | 90 | 88 | 18 | 22½ | 45 | 45 | 90 | 60 | 16 | 46 |
| 21 | Harilal Yadav | 18 M | 82 | 45 | 45 | 90 | 52 | 12 | 17½ | 46 | 44 | 90 | 89 | 10 | 30 |
| 22 | Ram Sinh Yadav | 22 M | 82 | 45 | 45 | 90 | 63 | 12 | 20 | 45 | 45 | 90 | 80 | 10 | 23 |
| 23 | Gukulanand Jha | 22 M | 80 | 45 | 45 | 90 | 45 | 16 | 15 | 45 | 45 | 90 | 95 | 12 | 20 |
| 24 | Devendra Jha | 21 M | 80 | 45 | 45 | 90 | 45 | 16 | 15 | 45 | 45 | 90 | 69 | 10 | 15 |
| 25 | Parmeshwar Jha. | 30 M | 81 | 48 | 27 | 75 | 27 | 10 | 7½ | 54 | 30 | 84 | 16 | 10 | 8 |
| 26 | V.N. Laldas | 20 M | 82 | 45 | 45 | 90 | 47 | 12 | 17½ | 45 | 45 | 90 | 102 | 10 | 28½ |
| 27 | Sahdev Sinh | 20 M | 76 | 45 | 45 | 90 | 61 | 14 | 20 | 39 | 39 | 78 | 52 | 14 | 20 |
| 28 | Sukhdev Mahato | 28 M | 83 | 45 | 52 | 97 | 77 | 18 | 25 | 45 | 45 | 90 | 70 | 19 | 17½ |
| 29 | Ramparjkha Das | 28 M | 83 | 52 | 52 | 104 | 87 | 16 | 25 | 45 | 45 | 90 | 90 | 16 | 25 |
| 30 | Ganga P. Sinh | 23 M | 75 | 28 | 13 | 41 | 13 | 10 | 5 | 46 | 42 | 88 | 39 | 8 | 15 |
| 31 | Kusheshwar Chaudhary | 22 M | 72 | 45 | 45 | 90 | 26 | 10 | 7½ | 17 | 13 | 30 | 14 | 10 | 2½ |
| 32 | Vavan Kumar Tiwari | 25 M | 81 | 46 | 45 | 91 | 51 | 8 | 17½ | 45 | 45 | 90 | 114 | 10 | 41 |
| 33 | Shrimati Kalavati Devi | 35 F | 83 | 45 | 45 | 90 | 67 | 8 | 20 | 45 | 45 | 90 | 93 | 8 | 30 |
| 34 | Shrimati Sudama Devi | 45 F | 81 | 45 | 45 | 90 | 58 | 8 | 12½ | 39 | 39 | 78 | 93 | 8 | 22½ |
| 35 | Shrimati Jogmaya Devi | 25 F | 83 | 45 | 45 | 90 | 57 | 8 | 22½ | 45 | 45 | 90 | 107 | 8 | 41 |
| 36 | Shrimati Savitri Devi | 50 F | 83 | 45 | 45 | 90 | 57 | 8 | 22½ | 42 | 42 | 84 | 100 | 8 | 37½ |
| 37 | Shrimati Son Dai | 26 F | 81 | 59 | 32 | 92 | 39 | 10 | 15 | 52 | 38 | 90 | 41 | 10 | 17½ |
| 38 | Shrimati Bacha Dai | 30 F | 82 | 45 | 45 | 90 | 76 | 10 | 22½ | 45 | 45 | 90 | 93 | 10 | 25½ |
| 39 | Shrimati Girja Devi | 28 F | 81 | 60 | 26 | 86 | 26 | 8 | 10 | 46 | 30 | 76 | 26 | 8 | 1 |
| 40 | Shrimati Radha Devi | 30 F | 83 | 42 | 42 | 84 | 49 | 8 | 17½ | 46 | 44 | 90 | 62 | 8 | 2 |
| | TOTAL | | | | | | | | | | | 3338 | 2932 | | |

Name of Parishramalaya: Sambalpur Darbhanga (Bihar)

Date of Starting : 5-1-56

Number of Charkha sets : 20

| S. No. | Name of operative | Class of Spinner | | No. of days of attendance | From 10-3-56 to 27-3-56 | | | | | | From 28-3-56 to 13-4-56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | | Carding | Spng. | Total | Production hanks | Count | Loss Tolas | Carding | Spng. | Total | Prodn. hanks | Counts | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Janki Devi . . . | 40 | F | 75 | 31 | 42 | 73 | 70 | 16 | 35 | 59 | 25 | 84 | 43 | 16 | 15 |
| 2 | Suryalal Devi . . . | 30 | F | 77 | 46 | 44 | 90 | 69 | 14 | 34 | 62 | 39 | 101 | 74 | 14 | 20 |
| 3 | Gayatri Devi . . . | 20 | F | 80 | 41 | 61 | 102 | 101 | 14 | 60 | 59 | 45 | 104 | 96 | 16 | 40 |
| 4 | Bhaghavan Devi . . | 25 | F | 78 | 43 | 61 | 104 | 105 | 14 | 60 | 59 | 50 | 109 | 114 | 16 | 40 |
| 5 | Seetha Devi . . . | 38 | F | 75 | 45 | 41 | 86 | 69 | 14 | 32 | 63 | 42 | 105 | 83 | 16 | 30 |
| 6 | Savithri Devi . . . | 20 | F | 74 | 38 | 59 | 97 | 102 | 16 | 50 | 55 | 51 | 101 | 104 | 14 | 45 |
| 7 | Rampyari Devi . . . | 35 | F | 74 | 48 | 45 | 93 | 75 | 16 | 36 | 56 | 30 | 86 | 63 | 14 | 15 |
| 8 | Leela Devi . . . | 15 | F | 71 | 44 | 42 | 86 | 66 | 14 | 30 | 63 | 42 | 105 | 87 | 16 | 35 |
| 9 | Yasodha Devi . . . | 18 | F | 83 | 52 | 43 | 95 | 68 | 14 | 35 | 48 | 29 | 77 | 61 | 16 | 25 |
| 10 | Kowsalaya Devi . . . | 12 | F | 68 | 54 | 49 | 98 | 49 | 14 | 25 | 39 | 65 | 104 | 130 | 16 | 50 |
| 11 | Ramakowari Devi . . | 33 | F | 85 | 34 | 45 | 79 | 67 | 18 | 30 | 50 | 31 | 81 | 59 | 16 | 20 |
| 12 | Foolkuari Devi . . . | 31 | F | 84 | 45 | 41 | 86 | 65 | 18 | 35 | 53 | 40 | 93 | 52 | 16 | 20 |
| 13 | Attar Devi . . . | 25 | F | 83 | 52 | 43 | 96 | 67 | 14 | 35 | 52 | 32 | 84 | 62 | 14 | 30 |
| 14 | Sushilla Kuanwari . . | 13 | F | 82 | 54 | 41 | 99 | 69 | 16 | 35 | 56 | 36 | 89 | 60 | 16 | 30 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Propada Devi | 22 | F | 85 | 51 | 51 | 102 | 84 | 15 | 45 | 49 | 44 | 16 | 89 | 16 | 30 |
| 16 | Tarakumari | 13 | F | 84 | 55 | 40 | 95 | 69 | 14 | 35 | 56 | 38 | 84 | 94 | 14 | 35 |
| 17 | Sudama Devi | 24 | F | 85 | 48 | 45 | 93 | 69 | 16 | 30 | 64 | 33 | 97 | 64 | 16 | 25 |
| 18 | Gita Kuanwari | 13 | F | 34 | 50 | 48 | 88 | 62 | 16 | 30 | 62 | 35 | 97 | 88 | 16 | 30 |
| 19 | Savithri Devi | 32 | F | 80 | 53 | 46 | 99 | 69 | 16 | 35 | 60 | 31 | 95 | 84 | 16 | 30 |
| 20 | Rhrushri Kaunwari | 13 | F | 81 | 44 | 45 | 89 | 68 | 14 | 40 | 58 | 36 | 94 | 76 | 14 | 30 |
| 21 | Kanti Kuanwari | 11 | F | 74 | 48 | 39 | 87 | 40 | 14 | 20 | 36 | 64 | 100 | 144 | 41 | 60 |
| 22 | Varila Nisha | 12 | F | 74 | 49 | 34 | .83 | 46 | 14 | 22 | 47 | 57 | 102 | 124 | 14 | 50 |
| 23 | Devaki Kuanwari | 13 | F | 84 | 48 | 39 | 87 | 63 | 14 | 40 | 48 | 28 | 70 | 65 | 14 | 25 |
| 24 | Ramkeshi Devi | 13 | F | 74 | 43 | 32 | 75 | 45 | 14 | 20 | 60 | 45 | 105 | 139 | 14 | 60 |
| 25 | Sona Devi | 34 | F | 74 | 48 | 38 | 86 | 48 | 14 | 25 | 54 | 52 | 106 | 26 | 14 | 50 |
| 26 | Rashvathi Devi | 16 | F | 75 | 58 | 44 | 102 | 61 | 12 | 30 | 60 | 43 | 98 | 104 | 14 | 40 |
| 27 | Kapil Devi Thakur | 22 | F | 75 | 51 | 54 | 105 | 120 | 14 | 70 | 36 | 7 | 43 | 7 | 14 | 2 |
| 28 | Mohal Takur | 24 | M | 75 | 43 | 53 | 96 | 113 | 14 | 65 | 51 | 59 | 60 | 24 | 14 | 15 |
| 29 | Hari Chand Chaudhery | 24 | M | 65 | 42 | 64 | 106 | 105 | 14 | 55 | 61 | 29 | 90 | 69 | 16 | 25 |
| 30 | Hira Lal Das | 20 | M | 81 | 48 | 41 | 89 | 62 | 14 | 30 | 62 | 12 | 184 | 94 | 16 | 35 |
| 31 | Jagannath Upadhya | 20 | M | 83 | 48 | 62 | 110 | 109 | 14 | 55 | 42 | 36 | 78 | 77 | 16 | 30 |
| 32 | Nokhelal Mehta | 29 | M | 82 | 48 | 53 | 101 | 91 | 14 | 45 | 52 | 46 | 98 | 122 | 16 | 50 |
| 33 | Sriram Upadya | 25 | M | 83 | 44 | 53 | 97 | 92 | 14 | 45 | 63 | 41 | 104 | 98 | 16 | 40 |
| 34 | Krishnan Dev Singh | 25 | M | 75 | 35 | 38 | 73 | 75 | 14 | 40 | 59 | 36 | 95 | 89 | 16 | 35 |
| 35 | Maheswar Saha | 25 | M | 78 | 49 | 62 | 111 | 138 | 16 | 70 | 60 | 35 | 105 | 116 | 11 | 40 |
| 36 | Ramavathar Singh | 18 | M | 79 | 52 | 51 | 103 | 83 | 14 | 45 | 63 | 39 | 102 | 84 | 11 | 30 |
| 37 | Ramasran Karan | 25 | M | 75 | 50 | 60 | 110 | 74 | 16 | 35 | 56 | 56 | 112 | 92 | 16 | 35 |
| 38 | Upendra Jha | 16 | M | 74 | 51 | 49 | 100 | 112 | 16 | 60 | 56 | 42 | 98 | 146 | 16 | 50 |
| 39 | Nageshar Singh | 25 | M | 74 | 44 | 51 | 95 | 81 | 14 | 40 | 54 | 46 | 100 | 102 | 16 | 40 |
| 40 | Vaidyanath Singh | 25 | M | 71 | 43 | 52 | 95 | 81 | 14 | 40 | 43 | 44 | 87 | 108 | 16 | 14 |
| | TOTAL | | | | | | | | | | | | 3656 | 3414 | | |

Name of Parishramalaya : PUSA ROAD
Dist. Darbhanga (Bihar).

Number of charkha sets :

| Serial No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 1956 to 27th March 1956 | | | | | | From 28th March 1956 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Smt. Mahasunlaridevi | 20 | F | 82 | 70 | 50 | 120 | 130 | 14 | 45 | 70 | 50 | 120 | 150 | 14 | 53 |
| 2 | ,, Rajkuraridevi | 25 | F | 82 | 70 | 50 | 120 | 130 | 14 | 45 | 70 | 50 | 120 | 150 | 14 | 35 |
| 3 | ,, Kusumkumari Sinha | 19 | F | 70 | 60 | 44 | 104 | 110 | 14 | 40 | 60 | 40 | 100 | 100 | 14 | 35 |
| 4 | ,, Jankidevi No. 1 | 32 | F | 78½ | 70 | 50 | 120 | 112 | 14 | 40 | 60 | 40 | 100 | 100 | 14 | 35 |
| 5 | ,, Taradevi | 22 | F | 73 | 65 | 55 | 120 | 115 | 14 | 41 | 60 | 36 | 96 | 100 | 14 | 35 |
| 6 | ,, Jayadevi | 31 | F | 79 | 70 | 50 | 120 | 112 | 14 | 40 | 70 | 50 | 120 | 100 | 14 | 35 |
| 7 | ,, Radhikadevi | 38 | F | 66½ | 50 | 30 | 80 | 85 | 14 | 30 | 64 | 40 | 104 | 100 | 14 | 35 |
| 8 | ,, Anujdevi | 34 | F | 73 | 67 | 53 | 120 | 120 | 14 | 41 | 60 | 36 | 96 | 100 | 14 | 35 |
| 9 | ,, Gangetridevi | 35 | F | 76½ | 67 | 53 | 120 | 120 | 14 | 41 | 60 | 36 | 96 | 100 | 14 | 35 |
| 10 | ,, Mayadevi | 32 | F | 73 | 68 | 52 | 120 | 100 | 14 | 35 | 64 | 40 | 104 | 100 | 14 | 35 |
| 11 | ,, Sukheswardevi | 19 | F | 53½ | 16 | 8 | 24 | 24 | 14 | 7 | 36 | 20 | 56 | 60 | 14 | 21 |
| 12 | ,, Rajeshwarydevi | 18 | F | 76½ | 67 | 53 | 120 | 120 | 14 | 41 | 64 | 40 | 104 | 100 | 14 | 35 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | ,, | Mukheshwaridevi | 13 | F | 70½ | 50 | 38 | 88 | 90 | 14 | 32 | 60 | 36 | 96 | 100 | 14 | 33 |
| 14 | ,, | Jankidevi No. 2 | 35 | F | 72½ | 63 | 49 | 112 | 115 | 14 | 41 | 60 | 36 | 96 | 100 | 14 | 35 |
| 15 | ,, | Jankidevi No. 3 | 24 | F | 72½ | 62 | 46 | 108 | 110 | 14 | 40 | 70 | 42 | 112 | 100 | 14 | 53 |
| 16 | ,, | Vedamidevi | 38 | F | 76 | 56 | 40 | 96 | 100 | 14 | 35 | 70 | 50 | 120 | 130 | 14 | 43 |
| 17 | ,, | Sundridevi | 25 | F | 73 | 50 | 30 | 80 | 90 | 14 | 32 | 70 | 50 | 120 | 133 | 14 | 44 |
| 18 | ,, | Vihamberdevi | 18 | F | 80 | 70 | 60 | 120 | 125 | 14 | 45 | 70 | 50 | 120 | 135 | 14 | 45 |
| 19 | ,, | Indrashandevi | 20 | F | 81 | 70 | 50 | 120 | 125 | 14 | 45 | 70 | 50 | 120 | 135 | 14 | 45 |
| 20 | ,, | Valantidevi | 20 | F | 81 | 70 | 50 | 120 | 125 | 14 | 45 | 70 | 50 | 120 | 135 | 14 | 45 |
| 21 | ,, | Shantidevi | 23 | F | 76 | 67 | 53 | 120 | 120 | 14 | 14 | 64 | 40 | 104 | 100 | 14 | 35 |
| 22 | ,, | Amisalnila | 33 | F | 78 | 67 | 53 | 120 | 120 | 14 | 14 | 70 | 50 | 120 | 120 | 14 | 45 |
| 23 | ,, | Shanti Murmur | 27 | F | 54½ | 14 | 20 | 34 | 32 | 14 | 11 | .. | .. | .. | .. | .. | .. |
| 24 | ,, | Sumitradevi No. 2 | 19 | F | 44 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 25 | ,, | Sumitradevi No. 3 | 30 | F | 79 | 67 | 53 | 120 | 120 | 14 | 14 | 70 | 50 | 120 | 120 | 14 | 45 |
| 26 | ,, | Shanidevi | 32 | F | .. | 45 | 35 | 80 | 80 | 14 | 30 | 70 | 50 | 120 | 120 | 14 | 45 |
| 27 | ,, | Sumitradevi No. 1 | 35 | F | 43 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 28 | ,, | Parvatidevi | 18 | F | 60 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 29 | ,, | Radhikadevi | 25 | F | 38 | 70 | 50 | 120 | 70 | 12 | 35 | 70 | 50 | 120 | 120 | 12 | 50 |
| 30 | ,, | Kusumkumari | 15 | F | 38 | 70 | 50 | 120 | 80 | 12 | 35 | 70 | 50 | 120 | 120 | 12 | 50 |
| 31 | ,, | Fulsundardevi | 27 | F | 35 | 56 | 40 | 96 | 70 | 12 | 25 | 70 | 50 | 120 | 80 | 12 | 35 |
| 32 | ,, | Khabsurtidevi | 27 | F | 35 | 56 | 40 | 96 | 60 | 12 | 25 | 70 | 50 | 120 | 80 | 12 | 35 |
| 33 | ,, | Ramdularidevi | 27 | F | 38 | 70 | 50 | 120 | 72 | 12 | 30 | 70 | 50 | 120 | 80 | 12 | 35 |
| 34 | ,, | Siyadevi | 27 | F | 38 | 70 | 50 | 120 | 72 | 12 | 30 | 75 | 45 | 120 | 72 | 12 | 30 |
| 35 | ,, | Vedamidevi | 16 | F | 38 | 70 | 50 | 120 | 75 | 12 | 31 | 75 | 45 | 120 | 72 | 12 | 30 |
| 36 | ,, | Girjadevi | 30 | F | 38 | 70 | 50 | 120 | 75 | 12 | 31 | 75 | 45 | 120 | 82 | 12 | 35 |
| 37 | ,, | Sitadevi | 40 | F | 38 | 75 | 45 | 120 | 60 | 12 | 25 | 75 | 45 | 120 | 82 | 12 | 35 |
| 38 | ,, | Kesharidevi | 25 | F | 37 | 75 | 45 | 120 | 75 | 12 | 31 | 75 | 45 | 120 | 96 | 12 | 40 |
| 39 | ,, | Ajnasodevi | 38 | F | 37 | 20 | 12 | 32 | 16 | 12 | 5 | 75 | 45 | 120 | 96 | 12 | 40 |
| 40 | ,, | Chanlrakaladevi | 23 | F | 38 | 70 | 50 | 120 | 60 | 12 | 25 | 70 | 50 | 120 | 70 | 12 | 30 |
| 41 | ,, | Ramvatidevi | 40 | F | 38 | 70 | 50 | 120 | 60 | 12 | 25 | 70 | 50 | 120 | 60 | 12 | 30 |

| 1 | 2 | 3 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | A g | Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Smt. Sumitrakumari . . . | 13 | F | 38 | 75 | 45 | 120 | 65 | 12 | 27 | 70 | 50 | 120 | 96 | 12 | 40 |
| 43 | „ Sampatradevi . . . | 16 | F | 38 | 75 | 45 | 120 | 75 | 12 | 31 | 70 | 50 | 120 | 96 | 12 | 40 |
| 44 | „ Manidevi . . . . | 25 | F | 38 | 75 | 45 | 120 | 60 | 12 | 25 | 70 | 50 | 120 | 96 | 12 | 40 |
| 45 | „ Ramkumaridevi . . . | 18 | F | 35 | 64 | 40 | 104 | 50 | 12 | 22 | 70 | 50 | 120 | 96 | 12 | 40 |
| 46 | „ Gayatridevi . . . | 20 | F | 24½ | 56 | 36 | 92 | 50 | 12 | 22 | 24 | 24 | 48 | 48 | 12 | 20 |
| 47 | „ Chandrakirashadevi . . | 16 | F | 34 | 56 | 36 | 92 | 50 | 12 | 22 | 75 | 45 | 120 | 100 | 12 | 41 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  |  | 4772 | 4330 |  |  |

**6 M of Production.**

Name of Parishramalaya : Dist. Darbhanga (Bihar) PUSA ROAD

| S.No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 Duration of work (Hours) | | | | | | From 28th March 56 to 13th April 1956 Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Sri Rameshwar Prasadsinh | 15 | M | 81 | 35 | 25 | 60 | 55 | 12 | 25 | 40 | 20 | 60 | 55 | 12 | 21 |
| 2 | Sri Nandi Pat Sinh. | 18 | M | 82 | 35 | 25 | 60 | 55 | 12 | 25 | 40 | 20 | 60 | 55 | 12 | 21 |
| 3 | Sri Ramvilasinh. | 18 | M | 78 | 30 | 22 | 52 | 48 | 12 | 20 | 36 | 20 | 56 | 50 | 12 | 20 |
| 4 | Sri Rajnarayansinh. | 14 | M | 75 | 35 | 25 | 60 | 53 | 12 | 21 | 32 | 20 | 52 | 45 | 12 | 18 |
| 5 | Sri Ramsundar Pandey. | 16 | M | 71½ | 30 | 15 | 45 | 45 | 12 | 18 | 30 | 14 | 44 | 40 | 12 | 16 |
| 6 | Sri Rajkumar Vasvan | 15 | M | 64 | 20 | 16 | 36 | 33 | 12 | 12 | 25 | 15 | 40 | 36 | 12 | 15 |
| 7 | Sri Ramnihora Jha | 15 | M | 61½ | 35 | 25 | 60 | 15 | 12 | 20 | 30 | 14 | 44 | 36 | 12 | 15 |
| 8 | Sri Jagatnarayan P. Sinh | 16 | M | 48 | 22 | 18 | 40 | 35 | 12 | 12 | 20 | 12 | 32 | 30 | 12 | 13 |
| 9 | Sri Umashankar Jha. | 16 | M | 76½ | 30 | 22 | 52 | 45 | 12 | 18 | 36 | 20 | 56 | 50 | 12 | 20 |
| 10 | Sri Ramanand Prasadsinh. | 15 | M | 69 | 20 | 12 | 32 | 35 | 12 | 12 | 32 | 20 | 52 | 45 | 12 | 18 |
| 11 | Sri Nagendra Thakur. | 18 | M | 71 | 30 | 25 | 55 | 35 | 12 | 12 | 32 | 20 | 52 | 50 | 12 | 20 |
| 12 | Sri Ram Swarup Yadav | 16 | M | 69 | 35 | 25 | 60 | 45 | 12 | 18 | 32 | 20 | 52 | 45 | 12 | 18 |
| 13 | Sri Satyanarayan Prasadsinh. | 17 | M | 53 | 25 | 19 | 44 | 38 | 12 | 15 | 13 | 7 | 20 | 24 | 12 | 10 |
| 14 | Sri Devnarayan Jha. | 14 | M | 79 | 30 | 22 | 52 | 55 | 12 | 22 | 40 | 20 | 60 | 55 | 12 | 21 |
| 15 | Sri Sachidanand Jha | 16 | M | 67½ | 30 | 26 | 56 | 53 | 12 | 21 | 36 | 20 | 56 | 53 | 12 | 20 |
| 16 | Sri Arjun Thakur | 17 | M | 59 | 30 | 26 | 56 | 53 | 12 | 21 | 40 | 20 | 60 | 55 | 12 | 21 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Sri Dachivalrav. | 16 M | 72 | 30 | 26 | 56 | 55 | 12 | 22 | 40 | 20 | 60 | 55 | 12 | 21 |
| 18 | Sri Ramji Mahto | 17 M | 67 | 35 | 25 | 60 | 53 | 12 | 21 | 36 | 20 | 56 | 50 | 12 | 20 |
| 19 | Sri Chandrabhushan Prasadsinh | 18 M | 74 | 35 | 25 | 60 | 53 | 12 | 21 | 38 | 22 | 60 | 60 | 12 | 25 |
| 20 | Sri Ramvilasrai. | 15 M | 17 | | | | | | | | | | | | |
| 21 | Sri Nandkishor Pandey | 18 M | 74 | 30 | 22 | 52 | 35 | 12 | 12 | 30 | 14 | 44 | 40 | 12 | 16 |
| 22 | Sri Shashiranjanprasad Verma. | 13 M | 60 | 30 | 26 | 56 | 52 | 12 | 20 | 8 | 4 | 12 | 12 | 12 | 5 |
| 23 | Sri Yogilal Chaudhry | 19 M | 74 | 35 | 25 | 60 | 55 | 12 | 22 | 36 | 20 | 56 | 56 | 12 | 20 |
| 24 | Sri Rajnarayan Mishra. | 16 M | 74 | 35 | 25 | 68 | 55 | 12 | 22 | 40 | 20 | 60 | 55 | 12 | 21 |
| 25 | Sri Dharmdev Sharma | 19 M | 70 | 20 | 12 | 32 | 30 | 12 | 13 | 8 | 4 | 12 | 12 | 12 | 5 |
| 26 | Sri Manmohan Jha | 16 M | 60 | 20 | 16 | 36 | 50 | 12 | 20 | 30 | 26 | 56 | 50 | 12 | 20 |
| 27 | Sri Manranjanprasad Verma | 12 M | 50 | 35 | 25 | 60 | 50 | 12 | 20 | 28 | 12 | 40 | 35 | 12 | 15 |
| 28 | Sri Shivnath Jha | 16 M | 60 | 30 | 26 | 56 | 50 | 12 | 20 | 32 | 20 | 52 | 45 | 12 | 18 |
| 29 | Sri Ramavallabh Jha | 14 M | 50 | 30 | 26 | 56 | 50 | 12 | 20 | 36 | 20 | 56 | 50 | 12 | 20 |
| 30 | Sri Ramdavalprasad. | 15 M | 50 | 30 | 26 | 56 | 40 | 12 | 16 | 36 | 20 | 56 | 50 | 12 | 20 |
| 31 | Sri Dhurendra Sharma | 16 M | 66 | 36 | 26 | 56 | 40 | 12 | 16 | 32 | 20 | 52 | 45 | 12 | 18 |
| 32 | Sri Shivchandra Jha | 16 M | 60 | 30 | 26 | 56 | 40 | 12 | 16 | 20 | 16 | 36 | 30 | 12 | 13 |
| 33 | Sri Chandinka Pandey | 18 M | 65 | 20 | 12 | 32 | 30 | 12 | 13 | 18 | 10 | 28 | 28 | 12 | 12 |
| 34 | Sri Devnathsinh. | 17 M | 60 | 25 | 15 | 40 | 40 | 12 | 16 | 28 | 12 | 40 | 35 | 12 | 15 |
| 35 | Sri Hemchandrasinh. | 17 M | 65 | 12 | 8 | 20 | 30 | 12 | 13 | 30 | 18 | 48 | 40 | 12 | 16 |
| 36 | Sri Upendra Thakur | 16 M | 60 | 30 | 26 | 56 | 50 | 12 | 20 | 32 | 30 | 62 | 45 | 12 | 18 |
| 37 | Sri Ramnandar Chaudhry. | 18 M | 70 | 30 | 18 | 48 | 45 | 12 | 18 | 30 | 18 | 48 | 45 | 12 | 18 |
| 38 | Sri Vijaykumar Jha | 18 M | 70 | 20 | 12 | 32 | 30 | 12 | 13 | 36 | 20 | 56 | 50 | 12 | 20 |
| 39 | Sri Ramnandansinh. | 16 M | 70 | 35 | 25 | 60 | 60 | 12 | 25 | 40 | 20 | 60 | 60 | 12 | 25 |
| 40 | Sri Ramnarayan Sharma | 17 M | 70 | 35 | 25 | 60 | 40 | 12 | 16 | 40 | 20 | 60 | 55 | 12 | 22 |
| | TOTAL | | | | | | | | | | | 1906 | 1721 | | |

Name of Parishramalaya: Madhubani Shahpur (Bihar) No of charkha sets 10 Date of starting 6-1-56

| S.No. | Name of Operative | Class of spinner | | No. of days of Trg. | From 10th March to 27th March, 56 Duration of work (Hours) | | | | | | From 28th March to 23rd April, 56 Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Digamber Jha | 22 | M | 67 | 78 | 42 | 120 | 50 | 25 | 18 | 42 | 38 | 80 | 43 | 25 | 13 |
| 2 | Pitamber Jha | 21 | M | 67 | 78 | 42 | 120 | 51 | 25 | 18 | 82 | 38 | 120 | 40 | 25 | 12 |
| 3 | Mahesh Misra | 22 | M | 67 | 76 | 44 | 120 | 52 | 20 | 13 | 84 | 36 | 120 | 39 | 25 | 10 |
| 4 | Amirilal Misra | 22 | M | 67 | 76 | 44 | 120 | 46 | 16 | 15 | 81 | 39 | 120 | 44 | 20 | 13 |
| 5 | Rajendra Jha | 19 | M | 67 | 91 | 29 | 120 | 31 | 18 | 13 | 16 | 8 | 24 | 9 | 20 | 7 |
| 6 | Ramprasad Rai | 21 | M | 67 | 55 | 25 | 80 | | 20 | 9 | 20 | 12 | 32 | 20 | 20 | 9 |
| 7 | Kulanand Jha | 22 | M | 67 | 75 | 45 | 120 | 49 | 20 | 17 | 81 | 39 | 120 | 25 | 20 | 19 |
| 8 | Harikant Jha | 24 | M | 67 | 75 | 45 | 110 | 32 | 18 | 14 | 82 | 38 | 120 | 69 | 18 | 21 |
| 9 | Umakant Jha | 22 | M | 67 | 74 | 46 | 120 | 48 | 20 | 14 | 88 | 32 | 120 | 39 | 20 | 15 |
| 10 | Devendra Jha | 22 | M | 67 | 78 | 18 | 96 | 15 | 18 | 6 | 16 | 8 | 24 | 16 | 18 | 11 |
| 11 | Jayanandan Misra | 29 | M | 67 | 77 | 43 | 120 | 48 | 20 | 16 | 89 | 31 | 120 | 49 | 20 | 17 |
| 12 | Kapileshvardas | 19 | M | 67 | 77 | 43 | 120 | 44 | 18 | 15 | 87 | 33 | 120 | 89 | 20 | 51 |
| 13 | Shivprasad Chaudhry | 20 | M | 67 | 78 | 42 | 120 | 42 | 20 | 15 | 86 | 34 | 120 | 67 | 20 | 45 |
| 14 | Umakant Chaudhary | 22 | M | 67 | 78 | 42 | 120 | 41 | 20 | 15 | 86 | 34 | 120 | 55 | 25 | 47 |
| 15 | Shamsunder Jha | 21 | M | 67 | 30 | 15 | 45 | 13 | 20 | 7 | 12 | 6 | 18 | 9 | 25 | 7 |
| 16 | Madhyavdas | 22 | M | 67 | 75 | 45 | 120 | 47 | 20 | 16 | 82 | 38 | 120 | 55 | 20 | 35 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Cheeranjiv Jha | 22 M | 67 | 75 | 45 | 120 | 48 | 25 | 15 | 82 | 38 | 120 | 65 | 25 | 39 |
| 18 | Ganour Choudhry | 27 M | 67 | 75 | 45 | 120 | 56 | 25 | 14 | 83 | 37 | 120 | 69 | 25 | 41 |
| 19 | Draupati Dai | 30 F | 67 | 77 | 43 | 120 | 44 | 20 | 14 | 83 | 37 | 120 | 60 | 20 | 38 |
| 20 | Sadbhama Dai | 22 F | 67 | 77 | 43 | 120 | 43 | 20 | 14 | 40 | 40 | 120 | 40 | 20 | 39 |
| 21 | Liladevi | 21 F | 67 | 76 | 44 | 120 | 41 | 20 | 16 | 89 | 31 | 120 | 39 | 20 | 28 |
| 22 | Bawadai | 35 F | 67 | 78 | 42 | 120 | 30 | 20 | 11 | 80 | 40 | 120 | 44 | 25 | 30 |
| 23 | Annapurana Dai | 30 F | 67 | 78 | 42 | 120 | 41 | 20 | 24 | 78 | 42 | 120 | 70 | 25 | 45 |
| 24 | Rameshwari Dai | 28 F | 67 | 78 | 42 | 120 | 40 | 20 | 19 | 78 | 42 | 120 | 65 | 20 | 44 |
| 25 | Annapurna Dai | 28 F | 67 | 79 | 41 | 120 | 31 | 18 | 15 | 76 | 40 | 120 | 89 | 18 | 51 |
| 26 | Jagtarni Dai | 30 F | 67 | 55 | 25 | 80 | 15 | 16 | 7 | 82 | 38 | 120 | 15 | 16 | 11 |
| 27 | Durga Dai | 31 F | 67 | 78 | 42 | 120 | 51 | 02 | 17 | 88 | 32 | 120 | 44 | 20 | 13 |
| 28 | Sitaram Shahni | 16 F | 67 | 78 | 42 | 120 | 40 | 02 | 14 | 81 | 39 | 120 | 65 | 25 | 15 |
| 29 | Trivenidevi | 25 F | 67 | 60 | 28 | 88 | 17 | 25 | 11 | 90 | 30 | 120 | 31 | 29 | 19 |
| 30 | Anuradhadevi | 35 F | 67 | 78 | 42 | 120 | 47 | 30 | 19 | 89 | 31 | 120 | 42 | 20 | 10 |
| 31 | Vidyadevi | 22 F | 67 | 78 | 42 | 120 | 57 | 22 | 20 | 82 | 38 | 120 | 74 | 25 | 41 |
| 32 | Niranjani Dai | 25 F | 67 | 78 | 42 | 120 | 60 | 20 | 15 | 80 | 40 | 120 | 109 | 25 | 41 |
| 33 | Zalni Dai | 40 F | 67 | 101 | 19 | 120 | 17 | 20 | 7 | 110 | 10 | 120 | 11 | 25 | 9 |
| 34 | Indramaya Dai | 33 F | 67 | 77 | 43 | 120 | 41 | 22 | 15 | 89 | 31 | 120 | 65 | 25 | 39 |
| 35 | Niranjani Dai | 20 F | 67 | 78 | 42 | 120 | 31 | 20 | 13 | 89 | 40 | 120 | 93 | 20 | 53 |
| 36 | Maheshwari Devi | 21 F | 67 | 101 | 19 | 120 | 18 | 20 | 8 | .. | .. | .. | .. | .. | .. |
| 37 | Anjani Dai | 24 F | 67 | 78 | 42 | 120 | 80 | 22 | 27 | 78 | 42 | 120 | 112 | 25 | 57 |
| 38 | Krutmukhi | 30 F | 67 | 78 | 18 | 120 | 17 | 20 | 8 | 82 | 28 | 120 | 34 | 25 | 25 |
| 39 | Fuldai | 27 F | 67 | 102 | 42 | 120 | 41 | 25 | 14 | 82 | 38 | 120 | 58 | 25 | 45 |
| 40 | Jatarni Dai | 31 F | 67 | 78 | 42 | 120 | 41 | 20 | 21 | 80 | 40 | 120 | 34 | 25 | 54 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 4258 | 2056 |  |  |

No. of charkha sets:—20

Name of Parishramalya: Kapsiya DARBHANGA (Bihar) Date of starting 6/1/56

| S.No. | Name of Operative | Class of Spinner | | No. of days of Trg. | From 10th March to 27th March, 56. Duration of work (Hours) | | | | | | From 28th March to 13th April, 56. Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Card-ing | Spg. | Total | Prodn hanks. | Count | Loss tolas | Card-ing | Spg. | Total | Prodn hanks | Count | Loss tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Shri Anamulla | 18 | M | 80 | 52 | 46 | 98 | 72 | 26½ | 15 | 54 | 50 | 104 | 76 | 16 | 27 |
| 2 | Shri Shahid Busen | 20 | M | 82 | 52 | 50 | 102 | 75 | 17 | 16 | 54 | 52 | 106 | 86 | 17 | 22 |
| 3 | Shri Genesh Jha | 25 | M | 79 | 56 | 55 | 111 | 75 | 16 | 20 | 55 | 50 | 105 | 112 | 16 | 32 |
| 4 | Shri Krishna Ram Jha | 18 | M | 98 | 55 | 54 | 109 | 65 | 15½ | 15 | 52 | 54 | 106 | 100 | 17 | 32 |
| 5 | Shri Rudhranath Jha | 40 | M | 84 | 56 | 60 | 116 | 75 | 19½ | 20 | 50 | 55 | 105 | 132 | 16 | 33 |
| 6 | Shri Asbchandra Jha | 31 | M | 80 | 58 | 55 | 113 | 77 | 18 | 20 | 55 | 55 | 110 | 133 | 17 | 33 |
| 7 | Shri Chitranjoan Chaudhry | 38 | M | 84 | 56 | 54 | 110 | 75 | 18½ | 15 | 52 | 53 | 105 | 76 | 21 | 20 |
| 8 | Shri Vaidyanath Jha | 24 | M | 21 | 58 | 55 | 112 | 73 | 16¼ | 17½ | 53 | 54 | 107 | 95 | 12 | 21 |
| 9 | Shri Kameshvar Jha | 18 | M | 80 | 55 | 56 | 114 | 66 | 15½ | 15 | 54 | 55 | 109 | 71 | 16 | 21 |
| 10 | Shri Yaduvir Jha | 28 | M | 82 | 58 | 54 | 109 | 66 | 15¾ | 15 | 55 | 57 | 112 | 72 | 17 | 21 |
| 11 | Shri Murli Chaudhory | 20 | M | 22 | 58 | 56 | 114 | 70 | 16 | 61¼ | 55 | 59 | 114 | 79 | 16 | 20 |
| 12 | Shri Kashikant Jha | 32 | M | 79 | 55 | 54 | 109 | 60 | 15¾ | 15 | 50 | 52 | 102 | 73 | 20 | 21 |
| 13 | Shri Gopikant Jha | 32 | M | 79 | 58 | 57 | 115 | 70 | 15½ | 17½ | 52 | 53 | 105 | 93 | 20 | 21 |
| 14 | Shri Uman Jha | 35 | M | 76 | 57 | 56 | 113 | 75 | 10¼ | 16¼ | 53 | 54 | 107 | 100 | 22 | 27 |
| 15 | Shri Balmukand Jha | 30 | M | 82 | 59 | 58 | 117 | 79 | 16 | 20 | 55 | 54 | 109 | 164 | 21 | 41 |
| 16 | Shri Gangadhar Jha | 30 | M | 84 | 57 | 56 | 113 | 71 | 16¼ | 20 | 55 | 52 | 107 | 95 | 22 | 26 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Shri Sachidanand Sing . . | 32 | M | 84 | 58 | 59 | 117 | 65 | 16½ | 20 | 50 | 50 | 100 | 86 | 24 | 21 |
| 18 | Shri Ambika Pd.Sing . . | 28 | M | 79 | 58 | 59 | 117 | 65 | 16½ | 20 | 51 | 52 | 103 | 86 | 20 | 21 |
| 19 | Shri Jagishwar Thakur . . | 28 | M | 81 | 56 | 55 | 111 | 60 | 28 | 12½ | 52 | 55 | 107 | 95 | 22 | 21 |
| 20 | Shri Aganlal Yadav . . | 18 | M | 80 | 50 | 56 | 106 | 60 | 10 | 16½ | 54 | 50 | 104 | 92 | 16 | 27 |
| 21 | Shri Devchandra Misra . . | 20 | M | 82 | 55 | 58 | 113 | 75 | 10 | 20 | 55 | 55 | 110 | 103 | 17 | 21 |
| 22 | Shri Sarva Narayan Jha . . | 25 | M | 82 | 55 | 58 | 113 | 75 | 15 | 18¾ | 55 | 54 | 109 | 101 | 19 | 25 |
| 23 | Shri Sarva Narayan Jha . . | 30 | M | 75 | 58 | 50 | 108 | 60 | 26 | 15 | 53 | 55 | 108 | 88 | 16 | 30 |
| 24 | Shri Jitendra Jha • • • | 30 | M | 82 | 40 | 40 | 80 | 67 | 17 | 15 | 54 | 54 | 108 | 146 | 19 | 36 |
| 25 | Smt Tara Devi. . . . | 32 | F | 79 | 58 | 56 | 114 | 61 | 16¼ | 16½ | 55 | 52 | 107 | 84 | 17 | 26 |
| 26 | Shri Raj Kr . | 32 | M | 84 | 58 | 57 | 115 | 61 | 16¼ | 16¼ | 52 | 50 | 102 | 85 | 17 | 26 |
| 27 | Smt. Sitadevi . . . . . | 41 | F | 82 | 50 | 52 | 102 | 55 | 18 | 15 | 53 | 53 | 10 | 67 | 17 | 21 |
| 28 | Smt. Bhawani Devi . . . | 55 | F | 78 | 55 | 54 | 109 | 70 | 18 | 15 | 53 | 51 | 104 | 79 | 16 | 29 |
| 29 | Smt. Fuliaya . . . . | 35 | F | 84 | 55 | 52 | 107 | 50 | 18½ | 16½ | 52 | 50 | 102 | 76 | 14 | 25 |
| 30 | Smt. Dai Rani. . . . . . | 45 | F | 84 | 55 | 50 | 105 | 40 | 20 | 20 | 54 | 52 | 106 | 67 | 16 | 20 |
| 31 | Shri Jai Mukhai . . . | 45 | M | 91 | 57 | 56 | 113 | 75 | 20 | 15 | 57 | 57 | 114 | 122 | 20 | 27 |
| 32 | Smt. Jyalamlahi . . . | 25 | F | 81 | 56 | 58 | 114 | 70 | 20 | 16¼ | 55 | 55 | 110 | 77 | 20 | 25 |
| 33 | Smt. Pavitri Devi . . . | 32 | F | 63 | 55 | 55 | 110 | 65 | 3¾ | 8¾ | 47 | 47 | 94 | 69 | 16 | 20 |
| 34 | Shri Kamala Kant Jha . . | 30 | M | 59 | 55 | 50 | 105 | 68 | 14½ | 20 | 53 | 51 | 104 | 97 | 19 | 30 |
| 35 | Shri Umesh Jha . . . | 30 | M | 76 | 50 | 45 | 95 | 38 | 16½ | 11¼ | 53 | 50 | 103 | 64 | 17 | 17 |
| 36 | Shri Rameshwardas . . . | 20 | M | 84 | 58 | 56 | 114 | 75 | 16¾ | 21¼ | 56 | 55 | 111 | 110 | 17 | 23 |
| 37 | Shri Nirash Mishra . . . | 36 | M | 80 | 55 | 56 | 111 | 66 | 26 | 175 | 54 | 53 | 107 | 102 | 17 | 31 |
| 38 | Shri Ramesh Pathak . . . | 30 | M | 79 | 56 | 55 | 111 | 70 | 16½ | 16¼ | 55 | 52 | 107 | 95 | 17 | 32 |
| 39 | Shri Rama Datt Mishra . . | 22 | M | 82 | 55 | 56 | 111 | 55 | 22 | 12¼ | 54 | 50 | 104 | 92 | 16½ | 21 |
| 40 | Shri Upendra Chaudhary . . | 28 | M | 82 | 55 | 56 | 111 | 60 | 25 | 12½ | 53 | 52 | 105 | 92 | 17 | 21 |
| | TOTAL | | | | | | | | | | | | 4247 | 3732 | | |

Name of Parishramalaya: Mohamadpur P.O. Bindaurch (Bihar)

No. of Charkha Sets: 20

| S.No. | Name of spinner | Class of spinner | | No. of days of trg. | From 10th March 56 to 27 March 56. Duration of work (Hours) | | | | | | From 28th March 56 to 13th April 56. Duration of work (Hours). | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding | Spg. | Total | Prodn. hanks | Count. | Loss tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Vrajendra Chaudhary. | 20 | M | 83 | 65 | 32 | 97 | 76 | 16 | 8 | 60 | 45 | 105 | 122 | 20 | 16 |
| 2 | Bhogendra Jha | 20 | M | 83 | 68 | 32 | 100 | 82 | 16 | 6 | 60 | 45 | 105 | 117 | 20 | 18 |
| 3 | Ukkan Chaudhary. | 30 | M | 82 | 65 | 32 | 97 | 71 | 16 | 6 | 56 | 41 | 97 | 99 | 20 | 17 |
| 4 | Vaidyanath Jha | 27 | M | 82 | 65 | 32 | 97 | 76 | 16 | 5 | 56 | 41 | 97 | 115 | 20 | 15 |
| 5 | Ramakhi Chaudhary | 30 | M | 83 | 65 | 32 | 97 | 76 | 16 | 6 | 60 | 45 | 105 | 122 | 20 | 22 |
| 6 | Lakhanlal Jha. | 40 | M | 81 | 65 | 32 | 97 | 65 | 16 | 8 | 52 | 37 | 89 | 108 | 20 | 14 |
| 7 | Devikant Jha | 22 | M | 80 | 67 | 32 | 99 | 75 | 16 | 4 | 48 | 33 | 81 | 106 | 20 | 15 |
| 8 | Vishikant Chaudhary | 20 | M | 83 | 65 | 32 | 97 | 72 | 16 | 6 | 60 | 45 | 105 | 126 | 20 | 14 |
| 9 | Parmanand Chaudhary. | 22 | M | 82 | 65 | 32 | 97 | 65 | 16 | 4 | 56 | 41 | 97 | 108 | 20 | 13 |
| 10 | Mahendra Chaudhary. | 20 | M | 80 | 65 | 32 | 97 | 76 | 16 | 5 | 48 | 33 | 81 | 97 | 20 | 12 |
| 11 | Ramnarayan Chaudhary | 22 | M | 83 | 68 | 32 | 100 | 90 | 16 | 8 | 60 | 45 | 105 | 116 | 20 | 14 |
| 12 | Mahendra Jha | 20 | M | 83 | 65 | 32 | 97 | 86 | 16 | 7 | 60 | 45 | 105 | 119 | 20 | 16 |
| 13 | Chaitanya Jha | 21 | M | 83 | 67 | 32 | 97 | 69 | 16 | 4 | 60 | 45 | 105 | 119 | 20 | 18 |
| 14 | Jivad Jha | 20 | M | 83 | 65 | 32 | 97 | 78 | 16 | 8 | 60 | 48 | 108 | 140 | 20 | 12 |
| 15 | Suryakant Thakar | 30 | M | 82 | 48 | 32 | 100 | 61 | 16 | 6 | 56 | 41 | 97 | 109 | 20 | 11 |
| 16 | Kulapal. | 18 | M | 83 | 65 | 32 | 97 | 63 | 16 | 10 | 60 | 45 | 105 | 96 | 20 | 13 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Kaptokhar Mandal | 25 | M | 83 | 65 | 32 | 97 | 57 | 16 | 6 | 60 | 45 | 105 | 92 | 20 | 13 |
| 18 | Tejnarayan Datt | 40 | M | 83 | 65 | 32 | 97 | 66 | 16 | 8 | 60 | 45 | 105 | 84 | 20 | 12 |
| 19 | Vidyapati Das | 20 | M | 83 | 66 | 32 | 98 | 76 | 16 | 5 | 60 | 45 | 105 | 110 | 20 | 13 |
| 20 | Ganga Thakur | 25 | F | 78 | 68 | 32 | 100 | 47 | 16 | 6 | 40 | 23 | 63 | 64 | 20 | 12 |
| 21 | Ramikabal Sai | 20 | M | 83 | 67 | 32 | 99 | 87 | 16 | 9 | 60 | 45 | 105 | 82 | 20 | 14 |
| 22 | Malikh | 20 | M | 82 | 65 | 32 | 97 | 60 | 16 | 6 | 56 | 41 | 97 | 99 | 20 | 10 |
| 23 | Babuji Pandhas. | 30 | M | 82 | 65 | 32 | 97 | 69 | 16 | 5 | 56 | 41 | 97 | 103 | 20 | 11 |
| 24 | Mohan Payav | 20 | M | 81 | 68 | 35 | 103 | 98 | 16 | 9 | 52 | 37 | 89 | 133 | 20 | 12 |
| 25 | Mrugeshwarprasad | 25 | M | 71 | 65 | 32 | 97 | 78 | 16 | 8 | 60 | 45 | 105 | 109 | 20 | 13 |
| 26 | Daitmukhi Pavi | 30 | F | 83 | 65 | 32 | 97 | 87 | 16 | 7 | 60 | 45 | 105 | 112 | 20 | 12 |
| 27 | Indra Kalabhai | 30 | M | 83 | 65 | 32 | 97 | 76 | 16 | 16 | 60 | 45 | 105 | 110 | 20 | 10 |
| 28 | Gangapai | 35 | M | 83 | 65 | 32 | 97 | 86 | 16 | 8 | 60 | 45 | 105 | 109 | 20 | 12 |
| 29 | Kamoppai | 40 | M | 83 | 65 | 34 | 99 | 93 | 16 | 9 | 60 | 45 | 105 | 108 | 20 | 15 |
| 30 | Nitya Pai | 30 | M | 83 | 65 | 23 | 97 | 61 | 16 | 8 | 60 | 45 | 105 | 118 | 20 | 20 |
| 31 | Tukmai Devi | 25 | F | 83 | 65 | 32 | 97 | 87 | 16 | 11 | 60 | 45 | 105 | 85 | 20 | 14 |
| 32 | Vilap Devi | 20 | F | 83 | 65 | 32 | 97 | 76 | 16 | 6 | 60 | 45 | 105 | 108 | 20 | 12 |
| 33 | Suraya Kalappa. | 30 | M | 79 | 65 | 32 | 97 | 64 | 16 | 5 | 44 | 29 | 73 | 83 | 20 | 11 |
| 34 | Mahalaxmi Devi | 20 | F | 61 | 65 | 35 | 100 | 59 | 16 | 6 | 36 | 21 | 57 | 45 | 20 | 13 |
| 35 | Amisa Devi | 25 | F | 62 | 65 | 32 | 97 | 55 | 16 | 6 | 40 | 25 | 65 | 39 | 20 | 14 |
| 36 | Unkalappai. | 40 | M | 80 | 65 | 32 | 97 | 62 | 16 | 4 | 48 | 33 | 81 | 49 | 20 | 19 |
| 37 | Chandrakalappai | 40 | M | 80 | 65 | 32 | 97 | 56 | 16 | 4 | 48 | 33 | 81 | 68 | 20 | 10 |
| 38 | Jaipalli Devi | 20 | F | 80 | 68 | 32 | 100 | 91 | 16 | 10 | 48 | 33 | 81 | 71 | 20 | 10 |
| 39 | Udhat Chaudhary | 18 | M | 83 | 65 | 32 | 97 | 69 | 16 | 6 | 60 | 45 | 105 | 109 | 20 | 9 |
| 40 | Kashappai. | 30 | M | 83 | 65 | 32 | 97 | 85 | 16 | 10 | 60 | 45 | 105 | 96 | 20 | 11 |
| 41 | Kunhappai. | 40 | M | 78 | 65 | 32 | 97 | 43 | 16 | 5 | 40 | 41 | 81 | 35 | 20 | 10 |
| | TOTAL | | | | | | | | | | | | 3,922 | 4,030 | | |

Name of the Parishramalaya: Madhepur, Tamoria, Distt. Darbhanga (Bihar)

Date of starting 5-1-56
No. of Charkha sets: 20

| S. No. | Name of spinner | Class of spinner | | No. of days of Trg. | From 10th Mar. 56 to 27th Mar. 56. Duration of Work (hours) | | | | | | From 28th Mar. to 13th Apl. 56. Duration of work (hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Jayakant Jha | 45 | M | 32 | | | | | | | | | | | | |
| 2 | Bhagirath Mishra | 35 | M | 44 | 12 | 9 | 21 | 18 | 18 | 6¼ | | | | | | |
| 3 | Parmanand Das | 30 | M | 52 | | | | | | | | | | | | |
| 4 | Bal Dev Das | 28 | M | 78 | 24½ | 23 | 47¼ | 57¾ | 18 | 25 | 51½ | 36½ | 88 | 58¾ | 14 | 20 |
| 5 | Ramash Lal Mandal. | 30 | M | 70 | 43½ | 37¾ | 101 | 83¾ | 16 | 30 | 60 | 46 | 106 | 88 | 16 | 25 |
| 6 | Jiyalal Mandal. | 24 | M | 73 | 53 | 44 | 97 | 84¾ | 16 | 30 | 60 | 48 | 108 | 98½ | 16 | 30 |
| 7 | Badri Misra | 19 | M | 81 | 55½ | 38 | 98½ | 86¾ | 18 | 30 | 55 | 41½ | 96½ | 83½ | 18 | 25 |
| 8 | Shukhia Devi | 25 | F | 81 | 55 | 29 | 84 | 68½ | 16 | 25 | 53 | 23 | 76 | 48½ | 14 | 15 |
| 9 | Lal Pari Devi | 22 | F | 81 | 20¼ | 18½ | 39¾ | 42¾ | 16 | 15 | 18½ | 18½ | 37 | 41½ | 16 | 15 |
| 10 | Rattan Vati Devi | 30 | F | 78 | 24½ | 21½ | 46 | 56 | 16 | 20 | 34¾ | 22¾ | 57½ | 54¾ | 18 | 15 |
| 11 | Lal Das Devi | 27 | F | 76 | 22¼ | 27 | 49¼ | 51¼ | 18 | 20 | 20 | 19½ | 39½ | 38¾ | 16 | 13¾ |
| 12 | Chandarkal Devi. | 35 | F | 20 | 35 | | | | | | | | | | | |
| 13 | Pan Das Devi | 18 | F | 74 | 43 | 38 | 81 | 65¼ | 18 | 25 | 55 | 34½ | 89½ | 51¾ | 16 | 15 |
| 14 | Gauri Devi | 35 | F | 81 | 52 | 34 | 86 | 65¼ | 16 | 30 | 55½ | 36½ | 92 | 51¾ | 16 | 15 |
| 15 | Janki Devi | 36 | F | 82 | 52 | 36 | 88 | 66¼ | 16 | 30 | 52½ | 44½ | 97 | 60¾ | 14 | 20 |
| 16 | Fulvanti Devi | 22 | F | 82 | 53 | 37½ | 90½ | 76½ | 18 | 25 | 54½ | 40 | 94½ | 57½ | 14 | 20 |
| 17 | Laxmikant | 40 | M | 79 | 25½ | 20 | 45½ | 44¾ | 18 | 15 | 30 | 21½ | 51½ | 41 | 14 | 15 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Rama Vallabshinh . . . | 19 | M | 78 | 48½ | 32 | 80½ | 72 | 18 | 27½ | 57 | 36½ | 93½ | 55½ | 16 | 15 |
| 19 | Markande Jha . . . . | 22 | M | 82 | 49½ | 42 | 91½ | 74¾ | 20 | 32½ | 61 | 47½ | 108½ | 93¾ | 16 | 30 |
| 20 | Numich Devi . . . . | 45 | F | 70 | 22½ | 24 | 46¾ | 50 | 16 | 20 | 28 | 23 | 51 | 44 | 16 | 16¼ |
| 21 | Sita Devi. . . . . | 30 | F | 72 | 21½ | 27 | 48½ | 51 | 16 | 17½ | 23½ | 22½ | 46 | 39 | 16 | 12½ |
| 22 | Vasudev Prasad . . . | 23 | M | 78 | 54 | 38 | 92 | 73¾ | 14 | 35 | 60 | 44 | 104 | 94 | 20 | 25 |
| 23 | Radhesham Rao . . . | 16 | M | 76 | 43¼ | 38 | 81¼ | 60¾ | 16 | 27½ | 45 | 36½ | 81½ | 72¾ | 18 | 20 |
| 24 | Jibadhrai. . . . . | 18 | M | 78 | 50 | 42 | 92 | 79½ | 16 | 35 | 58½ | 45½ | 104 | 83 | 18 | 25 |
| 25 | Tiro Devi . . . . | 12 | F | 79 | 45 | 46½ | 91½ | 76½ | 16 | 30 | 46½ | 35½ | 82 | 81 | 16 | 25 |
| 26 | Prema Kumari . . . . | 11 | F | 83 | 50 | 32 | 82 | 56½ | 14 | 25 | 57½ | 29 | 86½ | 48 | 14 | 15 |
| 27 | Trivani Kumari . . . | 12 | F | 73 | 21½ | 16¼ | 37¾ | 45¾ | 14 | 20 | 19¼ | 15 | 34 | 28 | 16 | 10 |
| 28 | Nirshi Devi . . . . | 45 | F | 79 | 23¼ | 25 | 48½ | 55 | 14 | 22½ | 33 | 26½ | 59¼ | 46¾ | 18 | 10½ |
| 29 | Mahadev Misra . . . . | 30 | M | 78 | 46¾ | 45 | 91¾ | 90¾ | 16 | 33½ | 55¼ | 44 | 99¼ | 83 | 20 | 20 |
| 30 | Triveni Devi . . . . | 28 | F | 73 | 23¾ | 17 | 40¾ | 46¾ | 16 | 15 | 17¾ | 17¼ | 35 | 29½ | 14 | 12½ |
| 31 | Vepani Devi . . . . | 40 | F | 67 | 24 | 22 | 46 | 43½ | 14 | 72½ | 27¾ | 11¼ | 30 | 23 | 14 | 7½ |
| 32 | Gandhadhar Jha . . . | 25 | M | 76 | 49 | 40½ | 89½ | 72¼ | 16 | 22½ | 62 | 44¾ | 106¾ | 96 | 16 | 32½ |
| 33 | Gayatri Devi . . . . | 15 | F | 77 | 53 | 45 | 98 | 84¼ | 16 | 30 | 57 | 41¼ | 98¼ | 94½ | 16 | 35 |
| 34 | Ramchandra Jha . . . | 27 | M | 55 | 15½ | 21½ | 37 | 46½ | 12 | 33 | 16 | 11¾ | 27½ | 33 | 14 | 15 |
| 35 | Ganzar Hassan . . . . | 18 | M | 79 | 55½ | 36 | 91½ | 72½ | 14 | 32½ | 51 | 40½ | 91½ | 61 | 14 | 25 |
| 36 | Shivnarayan Jha. . . . | 35 | M | 8 | | | | | | | | | | | | |
| 37 | Ram Lakhan Singh I . . . | 22 | M | 71 | 46½ | 39½ | 86 | 68½ | 14 | 28¾ | 54½ | 37½ | 83 | 68¾ | 16 | 20 |
| 38 | Ramlakhan Singh II . . . | 21 | M | 71 | 53¾ | 39½ | 93¼ | 70½ | 16 | 25 | 47½ | 38 | 85½ | 68¾ | 16 | 20 |
| 39 | Gaurishankar Jha. . . . | 20 | M | 45 | 43 | 26 | 69 | 40½ | 16 | 15 | | | | | | |
| 40 | Janardhan Chaudhary . . | 23 | M | 65 | 45 | 39 | 84½ | 52¾ | 14 | 21½ | 51½ | 37 | 88½ | 59¾ | 14 | 20 |
| | TOTAL | | | | | | | | | | | | 2,657 | 1,998 | | |

Name of Parishramalya : Mazolia
Bihar Mahila Vidyapeth
Distt. Darbhanga

Date of starting : 9-1-56
Ambar charkha Sets : 20

| S. No. | Name of operative | Class of spinner | | No. of days of Trg. | From 10th March to 27th March, 56 Duration of work (Hours) | | | | | | From 28th March to 13th April, 1956 Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Kameshwar Lal | 22 | M | 56 | 30 | 32 | 62 | 70 | 20 | 15 | 38 | 40 | 78 | 72 | 20 | 5 |
| 2 | Chandrabali Ch. | 23 | M | 54 | 25 | 34 | 59 | 75 | 20 | 13 | 41 | 42 | 83 | 74 | 20 | 5 |
| 3 | Babu Sahib | 35 | M | 50 | 27 | 32 | 59 | 62 | 16 | 14 | 38 | 39 | 77 | 65 | 12 | 7 |
| 4 | Urmiladevi | 28 | F | 35 | — | Sick— | | | | | 30 | 28 | 58 | 48 | 16 | 4 |
| 5 | Balbhadra Jha | 18 | M | 52 | 27 | 34 | 61 | 70 | 18 | 14 | 37 | 40 | 77 | 17 | 16 | 5 |
| 6 | Vachacha Dai | 24 | F | 48 | 35 | 33 | 68 | 52 | 14 | 13 | 33 | 34 | 67 | 56 | 14 | 6 |
| 7 | Umadevi | 40 | F | 55 | 44 | 42 | 86 | 64 | 14 | 32 | 36 | 35 | 71 | 58 | 14 | 9 |
| 8 | Kusum Padi | 35 | F | 56 | 32 | 36 | 68 | 59 | 16 | 20 | 31 | 30 | 61 | 52 | 14 | 6 |
| 9 | Chandra Prabha Devi | 23 | F | 56 | 30 | 45 | 75 | 69 | 18 | 22 | 28 | 29 | 57 | 42 | 14 | 5 |
| 10 | Sarupa Devi | 55 | F | 56 | 30 | 32 | 62 | 61 | 16 | 19 | 34 | 40 | 74 | 135 | 12 | 9 |
| 11 | Chandraman Devi | 23 | F | 56 | 35 | 36 | 71 | 69 | 18 | 18 | 30 | 32 | 62 | 66 | 16 | 7 |
| 12 | Vida Davi | 18 | F | 56 | 25 | 25 | 50 | 51 | 18 | 15 | 32 | 31 | 63 | 59 | 16 | 5 |
| 13 | Yogmaya Devi | 55 | F | 42 | 30 | 35 | 65 | 63 | 16 | 20 | 27 | 28 | 55 | 52 | 12 | 6 |
| 14 | Subhakalakumari | 15 | F | 56 | 40 | 36 | 76 | 70 | 16 | 21 | 30 | 30 | 60 | 45 | 16 | 5 |
| 15 | Savitrikumari | 14 | F | 56 | 42 | 37 | 79 | 17 | 16 | 22 | 33 | 32 | 65 | 59 | 16 | 5 |
| 16 | Saraswati Devi | 40 | F | 55 | 35 | 38 | 73 | 72 | 16 | 20 | 33 | 35 | 68 | 78 | 14 | 6 |
| 17 | Chitraroka Devi | 22 | F | 56 | 25 | 30 | 55 | 70 | 20 | 17 | 37 | 37 | 74 | 70 | 14 | 7 |
| 18 | Mahalaxmi Devi | 15 | F | 56 | 30 | 29 | 59 | 70 | 20 | 17 | 31 | 40 | 71 | 93 | 16 | 9 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Mantodevi . . . | 19 | F | 56 | 40 | 42 | 82 | 80 | 20 | 20 | 36 | 38 | 74 | 98 | 20 | |
| 20 | Vijayakrishna Chodery . | 24 | F | 40 | 35 | 36 | 71 | 86 | 16 | 22 | 27 | 25 | 52 | 43 | 14 | 5 |
| 21 | Truptinarayana . . . | 23 | F | 42 | 38 | 39 | 77 | 70 | 16 | 23 | 30 | 33 | 63 | 62 | 16 | 6 |
| 22 | Gudeshawar Chaudhery . | 24 | M | 52 | 35 | 30 | 65 | 73 | 16 | 25 | 39 | 38 | 77 | 61 | 14 | 5 |
| 23 | Shashibhushan . . . | 17 | M | 54 | 35 | 35 | 70 | 60 | 14 | 19 | 39 | 35 | 74 | 49 | 14. | 5 |
| 24 | M. Kashim . . . | 20 | M | 50 | 34 | 32 | 66 | 74 | 12 | 30 | 36 | 36 | 72 | 56 | 14 | 6 |
| 25 | M. Indrish . . . | 21 | M | 52 | 36 | 50 | 53 | 45 | 12 | 17 | 21 | 22 | 43 | 13 | 14 | 2 |
| 26 | Pan Dai . . . | 14 | F | 50 | 36 | 35 | 71 | 71 | 12 | 28 | 34 | 36 | 70 | 69 | 16 | 5 |
| 27 | Rajkant Jha . . . | 23 | M | 56 | 25 | 30 | 55 | 57 | 14 | 18 | 38 | 35 | 73 | 44 | 16 | 5 |
| 28 | Rajkumari Devi . . . | 22 | F | 49 | 30 | 25 | 55 | 42 | 14 | 15 | 31 | 34 | 65 | 60 | 14 | 6 |
| 29 | Vaua Dai . . . . | 45 | F | 56 | 65 | 40 | 105 | 60 | 16 | 18 | 39 | 35 | 64 | 67 | 14 | 6 |
| 30 | Savitri Devi . . . | 43 | F | 56 | 60 | 45 | 105 | 70 | 16 | 19 | 33 | 39 | 72 | 32 | 20 | 9 |
| 31 | Vina Devi . . . . | 60 | F | 48 | 70 | 35 | 105 | 50 | 16 | 14 | 27 | 28 | 55 | 53 | 14 | 5 |
| 32 | Mahalaxmi Divi . . . | 27 | F | 52 | 74 | 37 | 111 | 57 | 14 | 15 | 39 | 41 | 80 | 92 | 16 | 6 |
| 33 | Shyamakant Chaudhery . | 23 | M | 50 | 66 | 41 | 107 | 60 | 14 | 19 | 40 | 42 | 82 | 88 | 16 | 7 |
| 34 | Dineshwar . . . | 20 | M | 49 | 79 | 50 | 129 | 81 | 16 | 20 | 35 | 36 | 71 | 70 | 16 | 6 |
| 35 | Nitya Dai . . . . | 37 | F | 64 | 66 | 47 | 113 | 66 | 18 | 15 | 34 | 38 | 72 | 65 | 16 | 5 |
| 36 | Buchchi Kr. . . . | 14 | F | 55 | 67 | 45 | 112 | 68 | 20 | 17 | 33 | 36 | 69 | 69 | 14 | 6 |
| 37 | Laxmikant Jha . . . | 39 | M | 52 | 60 | 46 | 106 | 70 | 16 | 22 | 34 | 50 | 84 | 110 | 14 | 11 |
| 38 | Sitakumari . . . | 14 | F | 50 | 62 | 32 | 94 | 62 | 16 | 19 | 32 | 39 | 71 | 83 | 16 | 19 |
| 39 | Sobhakant Jha . . . | 19 | M | 12 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 40 | Jagdamba Devi . . . | 49 | F | 15 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | | 2,614 | 2,485 | | |

**Name of Parishramalaya :**

Dholi (N.E. Rly.) (80)
Muzafarpur (Bihar)

**Date or starting: 0-1-56**

**No. of Charkha sets : 10**

| S. No. | Name of operative | Class of Spinner | No. of Days of Trg. | From 10th March 56 to 27th March 56 Duration of work (Hours) | | | | | | From 28th March to 13th April 1956 Duration of work (Hours) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Card-ing | Spg. | Total | Pro-duc-tion hanks | Count | Loss Tolas | Card-ing. | Spg. | Total | Pro-duc-tion hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Manoramakumari . . . | 12 F | 83 | 22 | 47½ | 69½ | 35 | 16 | 12½ | 24 | 46 | 70 | 42 | 14 | 15 |
| 2 | Rampatidevi . . . | 35 F | 85 | 24 | 63 | 87 | 77 | 26 | 25 | 29 | 57½ | 86½ | 87 | 14 | 27 |
| 3 | Murardevi . . . . | 40 F | 85 | 18½ | 48½ | 67 | 31 | 12 | 13 | 23 | 45 | 68 | 38½ | 14 | 15 |
| 4 | Lilavatidevi . . . | 18 F | 85 | 18½ | 50 | 68½ | 31 | 12 | 13 | 22½ | 45 | 57½ | 38½ | 14 | 15 |
| 5 | Dayavatidevi . . . | 11 F | 82 | 25¾ | 45½ | 71 | 18 | 12 | 8 | 18½ | 36½ | 55 | 25 | 12 | 12 |
| 6 | Gulavpari Kumari . . | 11 F | 83 | 25¾ | 47½ | 73 | 21½ | 12 | 8½ | 18 | 45 | 63 | 30 | 12 | 13 |
| 7 | Kuntidevi . . . . | 45 F | 85 | 18½ | 48 | 66½ | 35½ | 12 | 14 | 21½ | 46½ | 68 | 37½ | 14 | 14 |
| 8 | Jaylaskumari . . . | 11 F | 85 | 18½ | 45 | 63½ | 35½ | 12 | 14½ | 21½ | 46½ | 68 | 37½ | 14 | 14 |
| 9 | Savitrikumari . . . | 11 F | 84 | 21½ | 47½ | 69 | 27½ | 12 | 11 | 22½ | 40½ | 63 | 28 | 14 | 10½ |
| 10 | Sijankumari . . . | 14 F | 84 | 21½ | 47½ | 69 | 27½ | 12 | 11 | 22½ | 40½ | 63 | 28 | 14 | 10½ |
| 11 | Mahandra Mishra . . . | 26 F | 85 | 20½ | 66 | 86½ | 71½ | 18 | 20 | 15½ | 65 | 60½ | 83 | 20 | 22 |
| 12 | Ramudev Mahto . . | 21 M | 85 | 20½ | 66 | 86½ | 71½ | 18 | 20 | 15½ | 65 | 20½ | 83 | 20 | 22 |
| 13 | Gurcharan Mahto . . . | 20 M | 85 | 16½ | 54 | 70½ | 43½ | 20 | 8 | 21½ | 55½ | 77 | 58 | 16 | 18½ |
| 14 | Kapurchand Shah . . | 31 M | 85 | 16½ | 54 | 70½ | 43½ | 20 | 8 | 20½ | 55½ | 77 | 58 | 16 | 18½ |
| 15 | Devram Mishra . . | 27 M | 82 | 20½ | 63½ | 84 | 74 | 16 | 23 | 18 | 62½ | 80½ | 68½ | 18 | 10 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Prajav Lalsa . . . | 30 M | 86 | 20½ | 63½ | 84 | 74 | 16 | 23 | 18 | 62½ | 80½ | 68½ | 18 | 10 |
| 17 | Palsan Ram . . . | 18 M | 83 | 20½ | 58 | 78½ | 51 | 18 | 14 | 18 | 51 | 69 | 48 | 16 | 15 |
| 18 | Nandan Ram . . . | 22 M | 76 | 20½ | 58 | 78½ | 51 | 18 | 14 | 18 | 51 | 69 | 48 | 16 | 16 |
| 19 | Praknileshwarainh . . | 21 M | 82 | 15½ | 68½ | 84 | 81 | 20 | 23 | 14 | 57 | 71 | 78 | 10 | 22 |
| 20 | Tileshwarisinh . . . | 18 M | 85 | 15½ | 68½ | 84 | 81 | 20 | 23 | 17 | 64 | 78 | 83 | 20 | 22 |
| 21 | Devemdra Thakur . . | 18 M | 82 | 26½ | 47½ | 74 | 30 | 14 | 11 | 18½ | 51 | 6½ | 31 | 12 | 11 |
| 22 | Chandreshwar Thakur . | 18 M | 51 | 4½ | 15 | 19½ | 8 | 14 | 3 | | | | | | |
| 23 | Umesh . . . . . | 20 M | 81 | 38 | 53½ | 91½ | 53 | 14 | 18½ | 18 | 66 | 84 | 81 | 16 | 28½ |
| 24 | Jugalkishor Mishra . . | 26 M | 83 | 18½ | 73 | 91½ | 82 | 20 | 18 | 16 | 74 | 90 | 87 | 16 | 22½ |
| 25 | Surendra Mishra . . . | 18 M | 68 | 23 | 51½ | 74½ | 43 | 16 | 14 | 18½ | 60 | 68½ | 48 | 14 | 15 |
| 26 | Ramsha Mitram . . . | 18 M | 63 | 23 | 51½ | 74½ | 43 | 16 | 14 | 18½ | 50 | 68½ | 49 | 14 | 15 |
| 27 | Nageshwar Shah . . | 20 M | 82 | 22½ | 57½ | 80 | 56 | 14 | 18 | 15½ | 56½ | 72 | 57½ | 18 | 15 |
| 28 | Sadanand Jha . . . | 22 M | 73 | 22½ | 57½ | 80 | 56 | 14 | 18 | 16½ | 47½ | 64 | 64½ | 20 | 15 |
| 29 | Chandreshwarrai . . | 26 M | 72 | 18 | 63½ | 81½ | 64½ | 16 | 22 | 20 | 65 | 85 | 14 | 16 | 28 |
| 30 | Harishchandra Mishra . | 20 M | 84 | 18 | 63½ | 81½ | 64½ | 16 | 20 | 12 | 65 | 77 | 85 | 16 | 28 |
| 31 | Jagdishnarayan Thakur . | 22 M | 81 | 20 | 57 | 77 | 66½ | 14 | 22½ | 18 | 65 | 84 | 83½ | 12 | 30 |
| 32 | Chandreshwar Thakur . | 78 M | 78 | 20 | 57 | 77 | 66½ | 14 | 22½ | 18 | 66 | 84 | 83½ | 18 | 30 |
| 33 | Jaymangal Jha . . . | 24 M | 80 | 22 | 55 | 77 | 44½ | 14 | 16 | 22 | 53 | 76 | 60½ | 12 | 25 |
| 34 | Vitarappudevainh . . | 18 M | 81 | 21½ | 55 | 76½ | 44½ | 14 | 16 | 20 | 47 | 67 | 53½ | 12 | 15 |
| 35 | Nantun Thakur . . . | 26 M | 81 | 26½ | 57½ | 83½ | 71 | 17 | 21 | 24½ | 63 | 87½ | 84½ | 16 | 31 |
| 36 | Ramchandra Shah . . | 21 M | 82 | 26½ | 57½ | 83½ | 71 | 17 | 21 | 24½ | 63 | 87½ | 84½ | 16 | 31 |
| 37 | Lalnarayan Thakur . . | 18 M | 77 | 18 | 55½ | 73½ | 43½ | 16 | 13 | 18½ | 52 | 70½ | 45 | 16 | 15 |
| 38 | Hiralal Mahto . . . | 20 M | 84 | 18 | 55½ | 73½ | 43½ | 16 | 13 | 18½ | 52 | 70½ | 45 | 16 | 15 |
| 39 | Shashishakhar Thakur . | 26 M | 32 | | | | | | | | | | | | |
| 40 | Ramvruksha Mahto . . | 21 M | 48 | | | | | | | | | | | | |
| | TOTAL | | | | | | | | | | | 2728 | 2153 | | |

*Proforma.*

Name of Parishramalaya : Bajpatti (**SITAMADHI**) (Bihar)

Date of starting : 5-1-56
Number of Charkha sets : 20

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 16th March 56 to 27th March 56 Duration of work (Hours) Carding | Spg. | Total | production hanks | Count | Loss Tolas | From 28th March 56 to 13th April 56 Duration of work (Hours) Carding | Spg. | Total | Production hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Brahmchari Shivpunjan | 19 M | 83 | 60 | 60 | 120 | 57 | 16 | 19 | 60 | 60 | 120 | 160 | 16 | 53 |
| 2 | Brahmchari Kedarji | 14 M | 83 | ” | ” | ” | 57 | ” | ” | ” | ” | ” | ” | ” | 54 |
| 3 | Brahmchari Brahmdevram | 26 M | ” | ” | ” | ” | ” | ” | ” | ” | ” | ” | ” | ” | 39 |
| 4 | Dipiya Devi | 25 F | ” | ” | 14 | 41 | ” | 13 | ” | ” | ” | ” | 44 | ” | 15 |
| 5 | Hanumanprasadsinh | 25 M | ” | ” | ” | 43 | .. | 14 | 14 | ” | ” | ” | 137 | ” | 45 |
| 6 | Ramashwarprasad | 35 M | ” | ” | ” | ” | ” | ” | ” | ” | ” | ” | 137 | ” | 46 |
| 7 | Gumashish | 23 M | ” | ” | ” | ” | 82 | ” | 27 | ” | ” | ” | 110 | ” | 36 |
| 8 | Harshnarayan Sinh | 20 M | ” | ” | ” | ” | 45 | 15 | 15 | ” | ” | ” | 55 | ” | 18 |
| 9 | Ramchandra Jha | 22 M | ” | ” | ” | ” | 65 | ” | 21 | ” | ” | ” | 125 | ” | 41 |
| 10 | Kaladevi | 22 F | ” | ” | ” | ” | 55 | ” | 18 | ” | ” | ” | 81 | ” | 27 |
| 11 | Chandrakumari | 13 F | ” | ” | ” | ” | 55 | ” | 19 | ” | ” | ” | 81 | ” | 27 |
| 12 | Shobhakant Jha | 21 M | ” | ” | ” | ” | 69 | ” | 23 | ” | ” | ” | 104 | ” | 35 |
| 13 | Krishnadev Jha | 23 M | ” | ” | ” | ” | 77 | ” | 25 | ” | ” | ” | 133 | ” | 44 |
| 14 | Rajmangalsinh | 22 M | ” | ” | ” | ” | 74 | ” | 24 | ” | ” | ” | 88 | ” | 29 |
| 15 | Reshna devi | 25 F | ” | ” | ” | ” | 44 | ” | 15 | ” | ” | ” | 53 | ” | 18 |
| 16 | Mohmed Suleman | 20 M | ” | ” | ” | ” | 73 | ” | 24 | ” | ” | ” | 140 | ” | 46 |
| 17 | Arjun Jha | 21 M | ” | ” | ” | ” | 69 | ” | 23 | ” | ” | ” | 103 | ” | 34 |
| 18 | Ramakumari | 12 F | ” | ” | ” | ” | 46 | ” | 105 | ” | ” | ” | 36 | ” | 12 |
| 19 | Ramdulari | 27 F | ” | ” | ” | ” | 59 | ” | 13 | ” | ” | ” | 56 | ” | 19 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | Vasantdevi | 19 F | " | " | " | " | 45 | " | 15 | " | " | " | 41 | " | 14 |
| 21 | Uttimadevi | 15 F | 55 | 60 | 60 | 120 | 24 | 16 | 18 | 8 | 6 | 7 | 24 | " | 13 |
| 22 | Samudridevi | 20 F | " | " | " | " | 39 | " | 43 | " | " | " | 16 | " | 13 |
| 23 | Hariharprasad | 16 M | " | " | " | " | 69 | " | 23 | " | " | " | 56 | " | 19 |
| 24 | Amudv Ansari | 30 M | " | " | " | " | 73 | " | 24 | " | " | " | 120 | " | 32 |
| 25 | Amravati | 38 F | " | " | " | " | 53 | " | 18 | " | " | " | 71 | " | 23 |
| 26 | Mahalaxmi Devi | 38 F | " | " | " | " | 36 | " | 42 | " | " | " | 89 | " | 30 |
| 27 | Ramrakhi Devi | 39 F | " | " | " | " | 40 | " | 13 | " | " | " | 65 | " | 22 |
| 28 | Ganeshdevi | 30 F | " | " | " | " | 53 | " | 18 | " | " | " | 79 | " | 23 |
| 29 | Ovad Ahmed | 15 M | 75 | 60 | 60 | 120 | 46 | 160 | 15 | 60 | 60 | 120 | 54 | .. | 18 |
| 30 | Sipalkhidevi | 25 F | 28 | " | " | " | .. | " | .. | " | " | " | .. |  | .. |
| 31 | Prabhavatidevi | 21 F | 83 | " | " | " | 59 | .. | 20 | " | " | " | 86 | " | 32 |
| 32 | Rajkumar Jha | 21 M | " | " | " | " | 74 | " | 25 | " | " | " | 70 | " | 30 |
| 33 | Vaidnath Mishra | 29 M | " | " | " | " | 77 | " | 26 | " | " | " | 138 | " | 42 |
| 34 | Jaybhadra Pathak | 32 M | " | " | " | " | 82 | " | 27 | " | " | " | 21 | " | 40 |
| 35 | Vaidnathprasad Sinh | 22 M | 11 | " | " | " | .. | " | .. | " | " | " | .. | " | .. |
| 36 | Tsjkstsn Vhsufhrty | 20 M | 83 | " | " | " | 64 | " | 21 | " | " | " | 119 | " | 39 |
| 37 | Vanshapalak | 21 M | " | " | " | " | 64 | " | 22 | " | " | " | 119 | " | 39 |
| 38 | Devendra Tivari | 22 M | 75 | " | " | " | 45 | " | 15 | " | " | " | 45 | 45 | 15 |
| 39 | Rataneshwari Thakur | 22 M | 78 | " | " | " | 38 | " | 13 | " | " | " | 44 | " | 15 |
| 40 | Chandreshwari Prasad | 21 M | 42 | " | " | " | 63 | " | 21 | " | " | " | 75 | " | 22 |
| 41 | Chandirkaprasad | 35 M | 43 | " | " | " | 72 | " | 24 | " | " | " | 63 | " | 21 |
| 42 | Mohmed Jahir Ahmed | 26 M | 42 | " | " | " | 66 | " | 22 | " | " | " | 60 | " | 23 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 5040 | 3183 |  |  |

Name of Parishramalaya : Tiril , Ranchi (BIHAR)

| | | | | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| S. No. | Name of Operative | Class of Spinner | No. of days of Trg. | Card-ing. | Spg. | Total | Pro-duc-tion hanks | Count | Loss Tolas | Card ing. | Spg. | Total | Pro-duc-tion hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Vindik Kachhap . . . . | 18-M | 41 | 64 | 64 | 128 | 22 | 8 | 7 | 64 | 64 | 128 | 33 | 10 | |
| 2 | Jaypal Kacchap . . . . | 15-M | 41 | 64 | 64 | 128 | 22 | 8 | 7 | 64 | 64 | 128 | 33 | 10 | |
| 3 | Mahesh Naik . . . . | 18-M | 41 | 64 | 64 | 128 | 23 | 10 | 6 | 64 | 64 | 128 | 34 | 10 | |
| 4 | Pyara Kachhan . . . . | 18-M | 27 | 56 | 56 | 112 | 16 | 10 | 4 | 16 | 16 | 32 | 8 | 10 | |
| 5 | Hindua Uranv . . . . | 15-M | 26 | 64 | 64 | 128 | 29 | 10 | 8 | 4 | 4 | 8 | 4 | 10 | |
| 6 | Budhran Urnav . . . . | 20-M | 37 | 64 | 64 | 128 | 28 | 10 | 7 | 48 | 48 | 96 | 19 | 10 | |
| 7 | Nathu Urnav . . . . | 18-M | 34 | 68 | 68 | 136 | 21 | 8 | 7 | 60 | 60 | 120 | 28 | 10 | |
| 8 | Sarsa Kachhap . . . . | 18-M | 30 | 60 | 60 | 120 | 16 | 8 | 5 | 60 | 60 | 120 | 28 | 8 | |
| 9 | Somari Devi . . . . | 15-F | 33 | 68 | 68 | 136 | 27 | 10 | 7 | 56 | 56 | 112 | 28 | 12 | |
| 10 | Nagi Devi . . . . | 15-F | 31 | 64 | 64 | 128 | 23 | 10 | 5½ | 52 | 52 | 104 | 16 | 8 | |
| 11 | Bhadia Devi . . . . | 16-F | 21 | 64 | 64 | 128 | 21 | 8 | 7 | 12 | 12 | 24 | 3 | 8 | |
| 12 | Mangri Devi . . . . | 15-F | 30 | 64 | 64 | 128 | 21 | 8 | 7 | 42 | 42 | 84 | 14 | 8 | |
| 13 | Rutvari Devi . . . . | 15-F | 29 | 68 | 68 | 136 | 24 | 10 | 6 | 42 | 42 | 84 | 24 | 10 | |
| 14 | Hariram . . . . . | 16-M | 34 | 72 | 72 | 144 | 23 | 8 | 7 | 64 | 64 | 128 | 48 | 8 | |
| 15 | Mahavir Ram . . . . | 14-M | 34 | 72 | 72 | 144 | 23 | 8 | 7 | 64 | 64 | 128 | 48 | 8 | |
| 16 | Sannu Ram . . . . | 14-M | 34 | 72 | 72 | 144 | 23 | 8 | 7 | 64 | 64 | 128 | 39 | 8 | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Dhakkan Ram . . . . | 12-M | 34 | 72 | 72 | 144 | 23 | 8 | 7 | 64 | 64 | 128 | 39 | 10 | |
| 18 | Babulal Ram . . . . | 17-M | 34 | 72 | 72 | 144 | 15 | 8 | 5 | 64 | 64 | 128 | 43 | 8 | |
| 19 | Sonra Munda . . . . | 15-M | 19 | 64 | 64 | 128 | 11 | 8 | 3½ | 12 | 12 | 24 | 6 | 8 | |
| 20 | Soma Munda . . . . | 15-M | 31 | 64 | 64 | 128 | 24 | 10 | 6 | 60 | 60 | 120 | 40 | 10 | |
| 21 | Jahruddin . . . . | 15-M | 31 | 64 | 64 | 128 | 24 | 10 | 7 | 60 | 60 | 120 | 40 | 8 | |
| 22 | Mahtti Urany . . . . | 18-M | 8 | 32 | 32 | 64 | 12 | 12 | | | | | | | |
| 23 | Sukhdev Mahti . . . . | 18-M | 9 | 36 | 36 | 72 | 12 | 15 | 10 | | | | | | |
| 24 | Saraswati Devi . . . . | 16-F | 13½ | 54 | 54 | 108 | 15 | 10 | 5 | | | | | | |
| 25 | Laxmi Devi . . . . | 15-F | 12 | 48 | 48 | 96 | 11 | 10 | 3 | | | | | | |
| 26 | Geeta Devi . . . . | 15-F | 11 | 44 | 44 | 88 | 11 | 8 | 4 | | | | | | |
| 27 | Riman Devi . . . . | 20-F | 11 | 44 | 44 | 88 | 11 | 8 | 4 | | | | | | |
| | TOTAL . . | | | | | | | | | | | 2072 | 575 | | |

Name of Parishramalaya : Varikhyatpur (83)

Distt : Patna (Bihar)

Date of starting : 20-1-56

Number of Charkha sets : 20

| S. No. | Name of Operative | Class of Spinner | No. of Days | From 10th March 56 to 27th March 56 |  |  |  |  |  | From 28th March 56 to 13th April 56 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  |  |  | Card-ing. | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Vrajanandasinh . . . . | 33-M | 59 | 24 | 26 | 50 | 42 | 12 | 16½ | 72 | 38 | 110 | 72 | 14 | 25 |
| 2 | Shiyaramsinh . . . . | 26-M | 75 | 68 | 45 | 113 | 90 | 14 | 35 | 70 | 40 | 110 | 85 | 16 | 27½ |
| 3 | Devanandanprasad . . . | 30-M | 45 | 34 | 18 | 52 | 28 | 12 | 12½ |  |  |  |  |  |  |
| 4 | Jogendra . . . . . | 28-M | 75 | 82 | 30 | 112 | 60 | 14 | 22½ | 76 | 35 | 111 | 62 | 14 | 22½ |
| 5 | Radharaman . . . . | 16-M | 75 | 80 | 32 | 112 | 60 | 12 | 25 | 80 | 32 | 112 | 61 | 14 | 20 |
| 6 | Sukhasagar Pande . . . | 30-M | 75 | 73 | 40 | 113 | 62 | 12 | 30 | 73 | 38 | 111 | 75 | 12 | 30 |
| 7 | Mixukprasad . . . . | 32-M | 75 | 71 | 81 | 152 | 80 | 14 | 37½ | 71 | 39 | 110 | 82 | 14 | 25 |
| 8 | Hariharprasad . . . . | 22-M | 75 | 70 | 36 | 106 | 75 | 14 | 35 | 74 | 36 | 110 | 80 | 16 | 15 |
| 9 | Rameshwarath . . . . | 23-M | 75 | 76 | 33 | 109 | 60 | 12 | 25 | 78 | 30 | 108 | 62 | 14 | 22½ |
| 10 | Madan prasad . . . . | 22-M | 75 | 72 | 40 | 112 | 66 | 12 | 27½ | 81 | 33 | 114 | 69 | 12 | 27½ |
| 11 | Harishwardra . . . . | 18-M | 70 | 71 | 40 | 111 | 55 | 12 | 30 | 76 | 30 | 106 | 69 | 12 | 25 |
| 12 | Ramanandanprasad . . . | 19-M | 75 | 70 | 41 | 111 | 80 | 14 | 27½ | 88 | 40 | 128 | 85 | 16 | 25 |
| 13 | Mahendrasinh . . . . | 22-M | 75 | 69 | 42 | 111 | 60 | 12 | 25 | 75 | 30 | 105 | 62 | 14 | 22½ |
| 14 | Dinanath Chaturvedi . . . | 23-M | 75 | 70 | 40 | 110 | 76 | 12 | 30 | 70 | 40 | 110 | 82 | 14 | 27½ |
| 15 | Ranekhal . . . . . | 15-M | 65 | 81 | 40 | 121 | 58 | 12 | 27½ | 8 | 6 | 14 | 12 | 5 | 5½ |
| 16 | Ramlaxman . . . . | 19-M | 75 | 73 | 40 | 113 | 72 | 12 | 25 | 71 | 34 | 105 | 74 | 12 | 27½ |
| 17 | Dineshwarprasad . . . | 16-M | 75 | 84 | 30 | 114 | 60 | 12 | 25 | 76 | 32 | 108 | 66 | 12 | 25 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Kamalsinh | 30-M | 75 | 76 | 37 | 113 | 65 | 12 | 27½ | 72 | 36 | 108 | 72 | 14 | 25 |
| 19 | Ramshohavan | 21-M | 75 | 71 | 40 | 111 | 95 | 14 | 32½ | 60 | 45 | 105 | 100 | 16 | 30 |
| 20 | Sariyugprasad | 22-M | 69 | 76 | 35 | 111 | 68 | 12 | 25 | 44 | 18 | 62 | 40 | 12 | 6½ |
| 21 | Niajanprasad | 16-M | 68 | 73 | 34 | 107 | 59 | 12 | 25 | 73 | 37 | 110 | 68 | 12 | 35 |
| 22 | Shivshankar Maheta | 22-M | 68 | 72 | 38 | 110 | 72 | 12 | 30 | 71 | 38 | 109 | 76 | 14 | 27½ |
| 23 | Rajkishor Upadyay | 25-M | 66 | 71 | 38 | 109 | 75 | 14 | 27½ | 69 | 40 | 109 | 80 | 14 | 28¾ |
| 24 | Dineshwar Pande | 16-M | 85 | 80 | 30 | 114 | 16 | 12 | 25 | 76 | 32 | 108 | 66 | 12 | 25 |
| 25 | Avdeshprasad | 16-M | 75 | 78 | 34 | 112 | 68 | 12 | 28¾ | 75 | 34 | 109 | 70 | 14 | 25 |
| 26 | Bansidharprasad | 18-M | 75 | 71 | 40 | 111 | 63 | 12 | 25 | 70 | 40 | 110 | 68 | 12 | 27½ |
| 27 | Jankidevi (i) | 18-F | 65 | 64 | 39 | 109 | 90 | 14 | 32½ | 42 | 18 | 60 | 42 | 16 | 11½ |
| 28 | Jankidevi (ii) | 16-F | 75 | 70 | 41 | 111 | 80 | 12 | 32½ | 68 | 42 | 110 | 81 | 14 | 27½ |
| 29 | Shyamadevi | 30-F | 75 | 66 | 44 | 110 | 78 | 12 | 32½ | 68 | 50 | 118 | 80 | 12 | 32½ |
| 30 | Shantidevi | 15-F | 68 | 72 | 40 | 112 | 79 | 14 | 27½ | 68 | 43 | 111 | 81 | 14 | 27½ |
| 31 | Damiyanti devi | 15-F | 68 | 71 | 43 | 114 | 86 | 14 | 30 | 64 | 45 | 109 | 89 | 9 | 32½ |
| 32 | Damiyantidevi (ii) | 12-F | 75 | 69 | 42 | 111 | 85 | 14 | 30 | 70 | 41 | 119 | 90 | 14 | 32½ |
| 33 | Rukhamanidevi | 14-F | 51 | 8 | 6 | 14 | 12 | 12 | 5 | 69 | 45 | 114 | 85 | 12 | 35 |
| 34 | Sundaridevi | 14-F | 75 | 69 | 40 | 108 | 89 | 14 | 30 | 65 | 40 | 105 | 92 | 14 | 32½ |
| 35 | Sumitadevi | 40-F | 22 |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | Sumadevi | 32-F | 75 | 73 | 38 | 111 | 75 | 14 | 25 | 63 | 48 | 111 | 84 | 14 | 30 |
| 37 | Bhagavatidevi | 34-F | 32 | 18 | 12 | 30 | 10 | 14 | 2½ |  |  |  |  |  |  |
| 38 | Naginadevi | 25-F | 56 | 75 | 35 | 110 | 58 | 12 | 25 | 75 | 36 | 111 | 58 | 12 | 22½ |
| 39 | Manoradadevi | 21-F | 55 | 70 | 45 | 115 | 78 | 12 | 32½ | 68 | 52 | 120 | 81 | 12 | 32½ |
| 40 | Dhanidevi | 25-F | 56 | 84 | 36 | 120 | 56 | 12 | 25 | 69 | 40 | 109 | 50 | 12 | 20 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 3891 | 2651 |  |  |

Name of Parishramalaya : Kanhya Chand Amber Parishramalaya Centre.
(Bihar)

Date of starting 11-1-56
No. of Charkha sets : 20

| S. No. | Name of Operative | Class of spinner Age Sex | No. of days of attendance | From 10th March 56 to 27th March 56 | | | | | | From 28th March to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spg. | Total | Prod. Hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prod. Hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Smt. Pama Devi . . . | 30 F | 80 | 41 | 59 | 100 | 61 | 61 | 29 | 68 | 46 | 114 | 68 | 16 | 31 |
| 2 | Smt Kamoda Devi; . . . | 25 F | 80 | 56 | 51 | 107 | 61 | 16 | 29 | 52 | 41 | 93 | 54 | 16 | 26 |
| 3 | Smt. Shiromani Devi . . | 29 F | 70 | 63 | 41 | 104 | 66 | 16 | 30 | 59 | 45 | 104 | 52 | 16 | 21 |
| 4 | Smt. Umeda Devi . . . | 36 F | 70 | 57 | 50 | 106 | 66 | 16 | 30 | 61 | 50 | 111 | 53 | 16 | 21 |
| 5 | Smt. Shiv Kuamri Devi . . | 27 F | 80 | 61 | 51 | 112 | 61 | 16 | 28 | 68 | 40 | 108 | 60 | 76 | 31 |
| 6 | Smt. Japami Devi . . . | 16 F | 80 | 61 | 51 | 112 | 61 | 16 | 29 | 67 | 40 | 107 | 60 | 16 | 31 |
| 7 | Smt. Tara Devi . . . | 30 F | 61 | 55 | 41 | 96 | 56 | 16 | 26 | 41 | 81 | 39 | 39 | 16 | 18 |
| 8 | Smt. Ram Laddu Devi . . | 28 F | 67 | 66 | 46 | 110 | 52 | 16 | 22 | 52 | 45 | 97 | 44 | 16 | 18 |
| 9 | Smt. Radha Devi . . . | 20 F | 80 | 46 | 35 | 81 | 62 | 16 | 26 | 41 | 30 | 71 | 46 | 16 | 22 |
| 10 | Smt. Dropadi Devi . . . | 19 F | 80 | 44 | 35 | 79 | 58 | 16 | 21 | 46 | 40 | 40 | 81 | 16 | 15 |
| 11 | Smt. Manti Devi . . . | 30 F | 80 | 52 | 40 | 92 | 62 | 16 | 25 | 13 | 8 | 21 | 15 | 16 | 11 |
| 12 | Smt. Neva Devi . . . | 31 F | 80 | 54 | 50 | 104 | 62 | 16 | 25 | 121 | 45 | 106 | 60 | 16 | 31 |
| 13 | Smt. Chandra Devi . . . | 18 F | 80 | 52 | 50 | 102 | 58 | 16 | 20 | 65 | 50 | 115 | 63 | 16 | 26 |
| 14 | Smt. Sharda Devi . . . | 18 F | 80 | 59 | 45 | 104 | 61 | 16 | 20 | 65 | 50 | 115 | 63 | 16 | 26 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Smt. Rumal Devi . . . | 20 F | 80 | 46 | 40 | 86 | 46 | 16 | 15 | 71 | 45 | 116 | 71 | 16 | 31 |
| 16 | Smt. Mushani Devi . . . | 21 F | 80 | 46 | 40 | 86 | 46 | 16 | 15 | 44 | 45 | 79 | 44 | 16 | 20 |
| 17 | Smt. Nunu Devi . . . | 35 F | 80 | 56 | 45 | 101 | 50 | 16 | 15 | 71 | 45 | 116 | 53 | 16 | 18 |
| 18 | Smt Satya Devi . . . | 22 F | 80 | 57 | 45 | 102 | 50 | 16 | 15 | 70 | 45 | 115 | 53 | 16 | 18 |
| 19 | Smt. Koshalaya Devi . . . | 24 F | 80 | 56 | 45 | 101 | 44 | 16 | 15 | 72 | 40 | 112 | 44 | 16 | 15 |
| 20 | Smt. Sita Devi . . . . | 32 F | 80 | 56 | 45 | 101 | 44 | 16 | 15 | 73 | 40 | 113 | 40 | 16 | 15 |
| 21 | Smt. Savitri Devi . . . | 18 F | 50 | 56 | 45 | 101 | 53 | 16 | 15 | 40 | 29 | 69 | 34 | 16 | 16 |
| 22 | Smt. Sunila Devi . . . | 16 F | 70 | 50 | 45 | 95 | 62 | 16 | 20 | 48 | 45 | 93 | 55 | 16 | 21 |
| 23 | Smt. Shiverani Devi . . . | 22 F | 75 | 41 | 45 | 86 | 62 | 16 | 20 | 53 | 40 | 93 | 51 | 18 | 22 |
| 24 | Smt. Savitri Devi . . . | 21 F | 77 | 45 | 20 | 65 | 43 | 16 | 15 | 62 | 40 | 102 | 51 | 16 | 23 |
| 25 | Smt. Rajmani Devi . . . | 34 F | 77 | 51 | 45 | 96 | 58 | 16 | 22 | 60 | 40 | 100 | 58 | 16 | 23 |
| 26 | Smt. Uma Devi . . . | 36 F | 80 | 40 | 45 | 85 | 59 | 16 | 25 | 64 | 40 | 104 | 58 | 16 | 23 |
| 27 | Smt. Sunila Devi . . . | 16 F | 70 | 60 | 40 | 100 | 55 | 16 | 20 | 66 | 40 | 106 | 47 | 19 | 26 |
| 28 | Smt. Vidorama Devi . . . | 16 F | 76 | 51 | 45 | 96 | 50 | 16 | 20 | 64 | 40 | 104 | 45 | 16 | 18 |
| 29 | Smt. Deresh Devi . . . | 45 F | 77 | 54 | 45 | 99 | 49 | 16 | 16 | 62 | 45 | 107 | 45 | 16 | 15 |
| 30 | Smt. Nayana Devi . . . | 36 F | 70 | 54 | 45 | 99 | 49 | 16 | 21 | 53 | 40 | 93 | 41 | 16 | 20 |
| 31 | Smt. Premveda Devi . . . | 14 F | 80 | 54 | 45 | 99 | 48 | 16 | 17 | 59 | 40 | 99 | 44 | 16 | 20 |
| 32 | Smt. Primila Devi . . . | 14 F | 77 | 53 | 45 | 98 | 49 | 16 | 17 | 58 | 40 | 98 | 44 | 16 | 20 |
| 33 | Smt. Subhedra Devi . . . | 16 F | 80 | 57 | 45 | 102 | 75 | 16 | 30 | 40 | 25 | 65 | 38 | 16 | 15 |
| 34 | Smt. Vimla Devi . . . | 14 F | 80 | 49 | 45 | 93 | 75 | 16 | 30 | 50 | 44 | 94 | 45 | 16 | 22 |
| 35 | Smt. Tara Devi . . . | 14 F | 54 | 57 | 42 | 99 | 45 | 16 | 15 | 67 | 40 | 107 | 56 | 16 | 22 |
| 36 | Smt. Parvati Devi . . . | 16 F | 52 | 58 | 40 | 98 | 44 | 16 | 15 | 44 | 25 | 69 | 44 | 16 | 20 |
| 37 | Smt. Naiomadevi . . . | 16 F | 76 | 59 | 40 | 99 | 64 | 16 | 25 | 59 | 40 | 52 | 92 | 16 | 20 |
| 38 | Shri Vipinbihari Pershad . . | 18 M | 74 | 54 | 45 | 99 | 63 | 16 | 25 | 62 | 40 | 102 | 54 | 16 | 20 |
| 39 | Shri Ravinder Pd. Chaudhery . | 22 M | 75 | 61 | 40 | 101 | 76 | 16 | 30 | 51 | 35 | 86 | 47 | 16 | 20 |
| 40 | Shri Muralidhar Pd. . . | 22 M | 75 | 61 | 40 | 101 | 76 | 16 | 30 | 66 | 40 | 106 | 67 | 16 | 21 |
|  | TOTAL . . |  |  |  |  |  |  |  |  |  |  | 3783 | 2061 |  |  |

Name of Parishramalaya BIHAR KHADI GRAMODYOG SANGH

Number of Charkha sets: 25·

| S. No. | Name of Operative | Class of spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | Car-ding | Spin-ning | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | | | | | | | | | | | | | |
| 1 | Tlpadevi . . . . | 20 | 33 | .. | .. | 88 | 9 | 10 | 4½ | .. | .. | 104 | 36 | 10 | 18 |
| 2 | Kirandevi . . . . | 20 | 35 | .. | .. | 104 | 24 | 10 | 12 | .. | .. | 104 | 68 | 10 | 19 |
| 3 | Shantidevi . . . | 30 | 38 | .. | .. | 112 | 28 | 10 | 14 | .. | .. | 120 | 65 | 10 | 32½ |
| 4 | Taradevi . . . . | 20 | 38 | .. | .. | 112 | 38 | 10 | 19 | .. | .. | 120 | 60 | 10 | 30 |
| 5 | Devki . . . . | 30 | 38 | .. | .. | 120 | 50½ | 14 | 20 | .. | .. | 120 | 72 | 14 | 25 |
| 6 | Narayani . . . . | 25 | 35 | .. | .. | 112 | 51 | 14 | 20 | .. | .. | 120 | 86 | 14 | 32 |
| 7 | Ptodadevi . . . . | 20 | 30¼ | .. | .. | 88 | 29 | 12 | 12 | .. | .. | 102 | 63½ | 12 | 27 |
| 8 | Suwala . . . . | 22 | 30 | .. | .. | 120 | 38½ | 12 | 16 | .. | .. | 102 | 59 | 12 | 25½ |
| 9 | Pinna . . . . | 30 | 30 | .. | .. | 120 | 31 | 10 | 15½ | .. | .. | 120 | 49 | 10 | 24 |
| 10 | Fulmani . . . . | 30 | 30½ | .. | .. | 120 | 26 | 10 | 13 | .. | .. | 120 | 48 | 10 | 246 |
| 11 | Manorama . . . | 22 | 35½ | .. | .. | 112 | 23 | 12 | 10 | .. | .. | 120 | 52½ | 10 | 2¼ |
| 12 | Rambalidevi . . . | 25 | 35½ | .. | .. | 112 | 24½ | 12 | 11 | .. | .. | 120 | 42 | 12 | 18 |
| 13 | Malti . . . . | 21 | 35½ | .. | .. | 112 | 23½ | 10 | 11½ | .. | .. | 102 | 52½ | 10 | 26 |
| 14 | Amola . . . . | 24 | 35½ | .. | .. | 112 | 27½ | 8 | 14 | .. | .. | 120 | 48 | 8 | 24 |
| 15 | Sama . . . . | 20 | 39 | .. | .. | 120 | 28 | 10 | 14 | .. | .. | 120 | 60 | 10 | 30 |
| 16 | Pana . . . . | 25 | 39 | .. | .. | 120 | 20½ | 10 | 11 | .. | .. | 120 | 45 | 10 | 23 |
| 17 | Sassidevi . . . . | 23 | 32½ | .. | .. | 120 | 67½ | 12 | 28 | .. | .. | 102 | 84 | 12 | 35 |
| 18 | Manorma . . . . | 23 | 31¼ | .. | .. | 120 | 32½ | 12 | 13 | .. | .. | 120 | 65 | 12 | 28 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Kapildev Thakur . . | 28M | 39 | .. | .. | 120 | 10 | 10 | 19 | .. | .. | 120 | 63 | 10 | 38 |
| 20 | Shyamsunder . . . | 18M | 39 | .. | .. | 112 | 25½ | 8 | 13 | .. | .. | 120 | 55 | 8 | 27½ |
| 21 | Umakant Mishra . . | 20M | 39 | .. | .. | 120 | 26 | 8 | 13 | .. | .. | 120 | 62 | 8 | 31 |
| 22 | Sitaram Yadav . . . | 18M | 38 | .. | .. | 120 | 32 | 8 | 16 | .. | .. | 120 | 59 | 8 | 30 |
| 23 | Sitaram Pashwal . . | 18M | 32½ | .. | .. | 120 | 20 | 8 | 10 | .. | .. | 102 | 39½ | 8 | 19 |
| 24 | Upendra Jha . . . | 20M | 37 | .. | .. | 112 | 13 | 10 | 12 | .. | .. | 120 | 35½ | 10 | 17 |
| 25 | Varjnandansingh. . . | 25M | 35 | .. | .. | 104 | 60½ | 12 | 25 | .. | .. | 196 | 57 | 12 | 28½ |
| 26 | Devki Sharma . . . | 22M | 39 | .. | .. | 120 | 32 | 12 | 13 | .. | .. | 120 | 56 | 12 | 28 |
| 27 | Mangeshwarsingh . . | 30M | 32½ | .. | .. | 120 | 27 | 10 | 13½ | .. | .. | 102 | 45 | 10 | 22½ |
| 28 | Budhadev Mishra . . | 20M | 39 | .. | .. | 112 | 41 | 10 | 20½ | .. | .. | 120 | 80 | 10 | 40 |
| 29 | Bharatprasadsingh . . | 18M | 36 | .. | .. | 120 | 22 | 10 | 11 | .. | .. | 120 | 48½ | 10 | 24½ |
| 30 | Maheshanandsingh . . | 18M | 39 | .. | .. | 96 | 26½ | 8 | 10 | .. | .. | 120 | 49½ | 8 | 24½ |
| 31 | Sharma . . . . . | 22M | 36 | .. | .. | 96 | 20½ | 12 | 11 | .. | .. | 120 | 84 | 12 | 35 |
| 32 | Chandar Sharma . . | 30M | 38 | .. | .. | 112 | 33 | 12 | 15 | .. | .. | 120 | 83 | 12 | 35 |
| 33 | M. Singh . . . | 20M | 38 | .. | .. | 112 | 34 | 10 | 17 | .. | .. | 120 | 45 | 10 | 22½ |
| 34 | Radharamansingh . . | 18M | 39 | .. | .. | 120 | 35 | 10 | 17 | .. | .. | 120 | 42½ | 10 | 21¼ |
| 35 | Sireshsingh . . . | 18M | 35 | .. | .. | 88 | 18 | 14 | 3⅛ | .. | .. | 120 | 45 | 14 | 15 |
| 36 | Ramkumar Sharma . . | 20M | 37 | .. | .. | 104 | 22½ | 20 | 10 | .. | .. | 120 | 72 | 20 | 17 |
| 37 | Bhramdev Thakur . . | 18M | 35 | .. | .. | 112 | 28 | 10 | 14 | .. | .. | 120 | 60 | 10 | 30 |
| 38 | Ramavtar Chudhari . . | 18M | 34 | .. | .. | 104 | 12 | 8 | 66 | .. | .. | 120 | 38 | 8 | 49 |
| 39 | Vibhutsingh . . . | 25M | 22 | .. | .. | 56 | 5 | 8 | 21½ | .. | .. | 120 | 39 | 8 | 20 |
| 40 | Nepalsingh . . . | 20M | 22 | .. | .. | 56 | 11 | 8 | 5½ | .. | .. | 120 | 51 | 8 | 26 |
|  | TOTAL . . |  |  |  |  |  |  |  |  |  |  | 4736 | 2236 |  |  |

No. 88 Date of starting 8-1-56

Name of Parishramalaya : Rani patra, Purnia (Bihar) Number of Charkha sets : 16

| S. No. | Name of operative | Class of Spinner | No. of days Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total hanks | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks. | Count | Loss tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex. | | | | | | | | | | | | | |
| 1 | Shri Akhaleshwar Shrusi | 36 M | 78 | 21 | 25 | 46 | 50 | 16 | 10 | 63 | 50 | 113 | 92 | 16 | 10 |
| 2 | Shri Ramlal Yadav | 10 M | 26 | 6 | 13 | 19 | 15 | 10 | 20 | .. | .. | .. | .. | .. | .. |
| 3 | Shri Jagatlal Sushi | 40 M | 43 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 4 | Shri Ganeshlal | 16 M | 31 | 8 | 8 | 16 | 8 | 10 | 15 | .. | .. | .. | .. | .. | .. |
| 5 | Shri Shakhi Chandra Sushi | 18 M | 29 | 5 | 6 | 11 | 6 | 10 | 10 | .. | .. | .. | .. | .. | .. |
| 6 | Shri Shalingram Thakore | 22 M | 59 | 8 | 12 | 20 | 12 | 12 | 20 | 13 | 15 | 28 | 28 | 16 | 10 |
| 7 | Shri Saryuprasad Razv | 22 M | 56 | 15 | 27 | 42 | 33 | 12 | 15 | 44 | 38 | 86 | 86 | 14 | 15 |
| 8 | Shri Balramprasadsinh | 23 M | 60 | 20 | 38 | 58 | 72 | 16 | 25 | 40 | 25 | 65 | 62 | 14 | 20 |
| 9 | Shri Laxikant Jha | 22 M | 57 | 15 | 19 | 34 | 19 | 18 | 10 | 26 | 25 | 51 | 42 | 14 | 10 |
| 10 | Shri Shirajundin | 22 M | 41 | 12 | 18 | 30 | 18 | 14 | 10 | 17 | 11 | 28 | 22 | 14 | 5 |
| 11 | Shri Shantilal Shrushi | 25 M | 58 | 21 | 23 | 44 | 23 | 14 | 15 | 41 | 36 | 77 | 70 | 12 | 20 |
| 12 | Shri Valeshwarprasad | 22 M | 77 | 18 | 24 | 42 | 21 | 12 | 10 | 47 | 40 | 87 | 78 | 16 | 25 |
| 13 | Shri Akhileshwar Yadav | 21 M | 70 | 15 | 36 | 51 | 22 | 10 | 25 | 20 | 15 | 35 | 28 | 12 | 10 |
| 14 | Shri Shukhdev Yadav | 28 M | 78 | 18 | 35 | 53 | 24 | 12 | 20 | 20 | 16 | 36 | 31 | 18 | 12 |
| 15 | Shri Deepanath Yadav | 26 M | 74 | 30 | 30 | 60 | 30 | 14 | 15 | 45 | 40 | 85 | 60 | 18 | 15 |
| 16 | Shri Anant Moti | 25 M | 79 | 16 | 24 | 40 | 20 | 14 | 20 | 46 | 40 | 86 | 60 | 18 | 10 |
| 17 | Shri Dhannu Rushi | 34 M | 46 | 5 | .. | 5 | .. | 10 | 10 | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Shri Dhanjay Rushi . . . | 32 M | 54 | 10 | 9 | 19 | 10 | 10 | 15 | .. | .. | .. | .. | .. | .. |
| 19 | Shri Avadhanath Podar . . | 22 M | 55 | 23 | 26 | 49 | 21 | 10 | 20 | 38 | 30 | 68 | 63 | 10 | 20 |
| 20 | Smt. Kamaladevi . . . | 16 F | 75 | 55 | 42 | 97 | 28 | 12 | 30 | 30 | 25 | 55 | 57 | 12 | 15 |
| 21 | Smt. Gegadevi . . . | 15 F | 80 | 39 | 35 | 74 | 12 | 20 | 20 | 35 | 30 | 65 | 79 | 14 | 16 |
| 22 | Smt. Savitadevi . . . | 21 F | 81 | 29 | 29 | 58 | 70 | 42 | 18 | 60 | 56 | 116 | 133 | 22 | 15 |
| 23 | Smt. Renubala Gope . . | 12 F | 69 | 10 | 18 | 28 | 11 | 10 | 10 | .. | .. | .. | .. | .. | .. |
| 24 | Smt. Surbala . . . | 26 F | 67 | 26 | 18 | 44 | 11 | 10 | 10 | .. | .. | .. | .. | .. | .. |
| 25 | Smt. Sugiadevi . . . | 13 F | 74 | 20 | 29 | 49 | 22 | 10 | 20 | 40 | 35 | 75 | 60 | 10 | 10 |
| 26 | Smt. Dayavatidevi . . . | 32 F | 78 | 20 | 36 | 56 | 32 | 10 | 10 | 43 | 40 | 83 | 90 | 12 | 15 |
| 27 | Smt. Kokiladevi . . . | 23 F | 72 | 22 | 17 | 39 | 9 | 14 | 15 | 25 | 22 | 47 | 23 | 16 | 20 |
| 28 | Smt. Manilbala Gope . . | 22 F | 76 | 22 | 17 | 39 | 9 | 14 | 15 | 26 | 29 | 55 | 23 | 16 | 10 |
| 29 | Smt. Rajkumari . . . | 10 F | 79 | 22 | 20 | 43 | 30 | 10 | 10 | 12 | 6 | 18 | 12 | 12 | 5 |
| 30 | Smt. Minudevi . . . | 18 F | 50 | 12 | 24 | 36 | 41 | 12 | 30 | .. | .. | .. | .. | .. | .. |
| 31 | Smt. Jagtaradevi . . . | 23 F | 30 | 5 | 10 | 15 | 10 | 10 | 10 | .. | .. | .. | .. | .. | .. |
| 32 | Smt. Parvati . . . | 20 F | 61 | 9 | 13 | 22 | 13 | 14 | 8 | 30 | 26 | 56 | 26 | 12 | 10 |
| 33 | Smt. Radhadevi . . . | 22 F | 63 | 19 | 30 | 39 | 31 | 14 | 12 | 22 | 19 | 41 | 36 | 14 | 10 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 1456 | 1261 |  |  |

Name of Parishramalaya VELAMPALAYAM
Tirupur-Madras.

Date of starting: 16-12-55
Number of Charkha sets : 27

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 |  |  |  |  |  | From 28th March 56 to 13th April 1956 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  |  |  | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Valliammal . . . . | 35 | 106 | 60 | 60 | 120 | 121 | 20 | 25 | 60 | 60 | 120 | 124 | 420 | 20 |
| 2 | Ponnual . . . . | 30 | 99 | 60 | 60 | 120 | 127 | 20 | 32 | 60 | 60 | 120 | 139 | 20 | 31 |
| 3 | Ammaim . . . . | 21 | 107 | 60 | 60 | 120 | 121 | 18 | 19 | 60 | 60 | 120 | 124 | 18 | 11 |
| 4 | Chellammal . . . . | 21 | 107 | 60 | 60 | 120 | 105 | 18 | 55 | 60 | 60 | 120 | 102 | 19 | 47 |
| 5 | Valliathal . . . . | 19 | 107 | 60 | 60 | 120 | 109 | 17 | 12 | 60 | 60 | 120 | 101 | 18 | 60 |
| 6 | Karupaial . . . . | 15 | 107 | 60 | 60 | 120 | 103 | 18 | 34 | 60 | 60 | 120 | 104 | 18 | 20 |
| 7 | Ponnuthal . . . . | 18 | 106 | 60 | 60 | 120 | 109 | 20 | 59 | 60 | 60 | 120 | 115 | 18 | 55 |
| 8 | Ammani . . . . | 17 | 106 | 60 | 60 | 120 | 97 | 17 | 44 | 60 | 60 | 120 | 61 | 17 | 33 |
| 9 | Thaivathal . . . . | 10 | 103 | 60 | 60 | 120 | 55 | 19 | 41 | 60 | 60 | 120 | 61 | 17 | 33 |
| 10 | Karuppaial . . . . | 14 | 86 | 60 | 60 | 120 | 81 | 20 | 57 | 60 | 60 | 120 | 85 | 19 | 36 |
| 11 | Papathal . . . . | 17 | 107 | 60 | 60 | 120 | 114 | 19 | 52 | 60 | 60 | 120 | 115 | 19 | 57 |
| 12 | Chamathal . . . . | 23 | 41 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 13 | Ammani . . . . | 13 | 107 | 60 | 60 | 120 | 100 | 18 | 11 | 60 | 60 | 120 | 114 | 18 | 37 |
| 14 | Palamuthal . . . . | 13 | 106 | 60 | 60 | 120 | 92 | 19 | 46 | 56 | 56 | 112 | 91 | 17 | 63 |
| 15 | Chamathal . . . . | 11 | 189 | 62 | 62 | 104 | 47 | 19 | 67 | .. | .. | .. | .. | .. | .. |
| 16 | Vanjiammal . . . . | 50 | 106 | 60 | 60 | 120 | 69 | 19 | 38 | 56 | 56 | 112 | 67 | 19 | 20 |
| 17 | Ammani . . . . | 11 | 88 | 60 | 60 | 120 | 65 | 18 | 50 | 60 | 60 | 120 | 65 | 17 | 60 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Karuppaial | 14 | 106 | 60 | 120 | 94 | 19 | 31 | 40 | 60 | 60 | 120 | 102 | 19 | 31 |
| 19 | Ammani | 15 | 106 | 60 | 60 | 120 | 91 | 18 | 40 | 60 | 60 | 120 | 90 | 17 | 36 |
| 20 | Arukathal | 12 | 103 | 60 | 60 | 120 | 79 | 18 | 14 | 60 | 60 | 120 | 75 | 17 | 27 |
| 21 | Valthammal | 19 | 56 | 60 | 60 | 120 | 78 | 16 | 49 | 60 | 60 | 120 | 87 | 17 | 51 |
| 22 | Chamathal | 14 | 55 | 60 | 60 | 120 | 45 | 16 | 51 | 56 | 56 | 112 | 51 | 16 | 62 |
| 23 | Lakshmi | 13 | 56 | 60 | 60 | 120 | 83 | 19 | 42 | 60 | 60 | 120 | 105 | 18 | 16 |
| 24 | Palamuthal | 11 | 56 | 60 | 60 | 120 | 47 | 16 | 31 | 60 | 60 | 120 | 61 | 16 | 42 |
| 25 | Ammani | 16 | 53 | 60 | 60 | 120 | 44 | 16 | 25 | 48 | 48 | 96 | 37 | 15 | 18 |
| 26 | Lakshmi | 20 | 37 | 44 | 44 | 88 | 22 | 17 | 51 | .. | .. | .. | .. | .. | .. |
| 27 | Govindamal | 11 | 56 | 60 | 60 | 120 | 65 | 17 | 45 | 60 | 60 | 120 | 71 | 18 | 38 |
| 28 | Chumpathal | 13 | 56 | 60 | 60 | 120 | 45 | 18 | 78 | 60 | 60 | 120 | 67 | 18 | 63 |
| 29 | Lakshmi | 12 | 56 | 60 | 60 | 120 | 66 | 20 | 56 | 60 | 60 | 120 | 83 | 18 | 41 |
| 30 | Ponnuyal | 14 | 56 | 60 | 60 | 120 | 73 | 18 | 52 | 60 | 60 | 120 | 89 | 17 | 52 |
| 31 | Rasathal | 13 | 56 | 60 | 60 | 120 | 57 | 16 | 62 | 60 | 60 | 120 | 69 | 16 | 56 |
| 32 | Machuthal | 15 | 36 | 60 | 60 | 120 | 69 | 17 | 53 | 60 | 60 | 120 | 81 | 18 | 36 |
| 33 | Ammani | 40 | 55 | 60 | 60 | 120 | 63 | 17 | 52 | 60 | 60 | 120 | 57 | 17 | 12 |
| 34 | Challammal | 14 | 56 | 60 | 60 | 120 | 67 | 17 | 60 | 60 | 100 | 120 | 71 | 15 | 51 |
| 35 | Lakshmi | 30 | 54 | 56 | 56 | 112 | 81 | 18 | 17 | 52 | 52 | 104 | 75 | 17 | 17 |
| 36 | Masathal | 14 | 55 | 60 | 60 | 120 | 79 | 17 | 17 | 60 | 60 | 120 | 91 | 18 | 42 |
| 37 | Palaiammal | 35 | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 38 | Chamathal | 16 | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 39 | Machugal | 15 | 3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 40 | Valliammal | 45 | 3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 41 | Pallaniammal | 30 | 36 | 40 | 40 | 80 | 42 | 15 | 27 | 56 | 56 | 112 | 73 | 16 | 24 |
| 42 | Chammathal | 19 | 42 | 60 | 60 | 120 | 82 | 15 | 48 | 60 | 60 | 120 | 82 | 16 | 44 |
| 43 | Ammani | 19 | 42 | 60 | 60 | 120 | 79 | 16 | 5 | 60 | 60 | 120 | 97 | 16 | 31 |
| 44 | Karuppayal | 20 | 42 | 60 | 60 | 120 | 80 | 16 | 34 | 60 | 60 | 120 | 99 | 16 | 32 |
| 45 | Valliammal | 28 | 42 | 60 | 60 | 120 | 79 | 16 | 44 | 60 | 60 | 120 | 84 | 15 | 74 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46 | Chinnakarupaiyal | 15 | 42 | 60 | 60 | 120 | 78 | 16 | 53 | 60 | 60 | 120 | 84 | 15 | 74 |
| 47 | Kuppayam | 20 | 34 | 60 | 60 | 120 | 68 | 16 | 31 | 28 | 28 | 56 | 29 | 21 | 33 |
| 48 | Ponnual | 19 | 42 | 60 | 60 | 120 | 76 | 15 | 46 | 60 | 60 | 120 | 90 | 16 | 37 |
| 49 | Arukkayal | 19 | 42 | 60 | 60 | 120 | 77 | 16 | 29 | 60 | 60 | 120 | 92 | 16 | 26 |
| 50 | Papapayal | 19 | 41 | 60 | 60 | 120 | 61 | 15 | 33 | 56 | 56 | 112 | 63 | 19 | 34 |
| 51 | Ponnuyal | 25 | 35 | 60 | 60 | 120 | 51 | 14 | 30 | 32 | 32 | 64 | 30 | 15 | 32 |
| 52 | Rajayal | 19 | 35 | 60 | 60 | 120 | 46 | 15 | 7 | 32 | 32 | 64 | 26 | 15 | 17 |
| 53 | Palaniammal | 35 | 10 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 54 | Ponnuyal | 14 | 42 | 60 | 60 | 120 | 56 | 13 | 30 | 60 | 60 | 120 | 68 | 41 | 41 |
| 55 | Chinnapakal | 15 | 42 | 60 | 60 | 120 | 50 | 14 | 64 | 60 | 60 | 120 | 70 | 17 | 21 |
| 56 | Pappalyal | 12 | 42 | 60 | 60 | 120 | 37 | 15 | 22 | 60 | 60 | 120 | 43 | 15 | 38 |
| 57 | Kannixammal | 15 | 21 | 36 | 36 | 72 | 20 | 14 | 43 | .. | .. | .. | .. | .. | .. |
| 58 | Chanathal | 18 | 13 | 4 | 4 | 8 | 2 | 13 | 9 | .. | .. | .. | .. | .. | .. |
| 59 | Karuppayal | 14 | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 60 | Papathi | 13 | 36 | 56 | 56 | 112 | 39 | 13 | 32 | 60 | 60 | 120 | 58 | 13 | 37 |
| | TOTAL | | | | | | | | | | | 5624 | 3965 | | |

Name of Parishramalaya : NAINAGOUNDANVALASU
MADRAS

| S. No. | Name of Operative | Class of spinner | No. of days of attendance | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spinning | Total | Production hanks | Count | Loss Tolas | Carding | Spinning | Total | Production hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age-Sex | | | | | | | | | | | | | |
| 1 | P. Subarayan . . . . | 35 M | 69 | 67 | 61 | 128 | 89 | 16 | 28 | 43 | 57 | 100 | 70 | 17 | 24 |
| 2 | N. Muthuswami . . . | 14 M | 68 | 62 | 66 | 128 | 84 | 18 | 15 | 46 | 44 | 90 | 71 | 17 | 42 |
| 3 | M. Chellappan . . . . | 22 M | 69 | 63 | 65 | 128 | 50 | 18 | 12 | 32 | 48 | 90 | 32 | 16 | 12 |
| 4 | K. Subarayan . . . . | 24 M | 69 | 62 | 66 | 128 | 104 | 19 | 37 | 50 | 50 | 100 | 77 | 18 | 40 |
| 5 | K. V. Viswanathan . . . | 17 M | 64 | 67 | 61 | 128 | 102 | 20 | 19 | 44 | 40 | 84 | 51 | 17 | 18 |
| 6 | K. S. Palanisamy . . . | 24 M | 64 | 50 | 54 | 104 | 54 | 19 | 10 | 43 | 57 | 100 | 47 | 20 | 17 |
| 7 | P. Swaminathan . . . | 15 M | 66 | 69 | 59 | 128 | 60 | 18 | 12 | 43 | 57 | 100 | 42 | 18 | .. |
| 8 | M. Natarajan . . . . | 27 M | 65 | 68 | 60 | 228 | 67 | 16 | 30 | 48 | 42 | 90 | 57 | 19 | .. |
| 9 | S. Ramaswamy . . . . | 35 M | 61 | 70 | 58 | 128 | 70 | 18 | 16 | 60 | 40 | 100 | 52 | 19 | .. |
| 10 | K. N. Ramaswamy . . . | 35 M | 60 | 70 | 58 | 128 | 108 | 20 | 30 | 49 | 51 | 100 | 62 | 18 | 34 |
| 11 | Muthammal . . . . | 35 M | .. | 70 | 50 | 120 | 54 | 18 | 30 | 60 | 40 | 100 | 41 | 19 | 10 |
| 12 | Palaniyathal . . . . | 14 M | .. | 67 | 61 | 128 | 57 | 18 | 20 | 60 | 40 | 100 | 41 | 19 | 10 |
| 13 | K. R. Palaniswamy . . . | 22 M | .. | 68 | 60 | 128 | 67 | 17 | 30 | 50 | 46 | 96 | 40 | 18 | .. |
| 14 | K. S. Rangaswami . . . | 23 M | .. | 69 | 59 | 128 | 112 | 18 | 30 | 38 | 30 | 68 | 45 | 18 | 12 |
| 15 | H. Chinnaswami . . . | 20 M | .. | 59 | 69 | 128 | 57 | 17 | .. | 52 | 48 | 100 | 56 | 18 | .. |
| 16 | K. P. Viswanathan . . . | 14 M | .. | 68 | 60 | 128 | 42 | 18 | 18 | 55 | 45 | 100 | 46 | 18 | 10 |
| | TOTAL | | | | | | | | | | | 1518 | 842 | | |

No. 54 (B)

Date of starting: 16-1-56

Name of Parishramalaya: NAINAGOUNDANVALASU MADRAS

No. of Charkha sets : 10

| S. No. | Name of Operative | Class of spinner. | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13 April 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | | | | | | | | | | | | | |
| 1 | P. Subarayan | 35 | 68⅛ | 67 | 61 | 128 | 89 | 16 | 28 | 39 | 57 | 100 | 70 | 17 | 24 |
| 2 | N. Muthuswamy | 14 | 67⅓ | 62 | 66 | 128 | 84 | 18 | 15 | 46 | 44 | 90 | 71 | 17 | 42 |
| 3 | M. Chellapem | 22 | 68½ | 63 | 65 | 128 | 50 | 18 | 12 | 42 | 48 | 90 | 32 | 16 | 12 |
| 4 | K. Subarayan | 24 | 68⅛ | 62 | 66 | 128 | 104 | 19 | 37 | 50 | 50 | 100 | 77 | 18 | 40 |
| 5 | K. V. Visvanathan | 17 | 63⅓ | 67 | 61 | 128 | 102 | 20 | 10 | 44 | 40 | 84 | 51 | 17 | 18 |
| 6 | K. S. Palamswamy | 24 | 63⅛ | 50 | 54 | 104 | 54 | 19 | 10 | 43 | 57 | 100 | 47 | 20 | 7 |
| 7 | R. Ganeshan | 15 | 32 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8 | R. Vellusamy | 22 | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 9 | S. Palanisamy | 22 | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 10 | P. Muthusamy | 18 | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 11 | P. Swaminathan | 15 | 65⅓ | 69 | 59 | 128 | 60 | 18 | 12 | 41 | 57 | 100 | 42 | .. | .. |
| 12 | K. N. Paramasamy | 24 | 34 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 18 | .. |
| 13 | M. Natrajan | 27 | 64½ | 68 | 60 | 128 | 67 | 16 | 30 | 48 | 42 | 90 | 57 | 19 | .. |
| 14 | S. Ramasamy | 35 | 64⅓ | 70 | 58 | 128 | 17 | 18 | 16 | 60 | 40 | 100 | 52 | 19 | .. |
| 15 | K. N. Ramasamy | 35 | 60½ | 70 | 58 | 128 | 108 | 20 | 30 | 49 | 51 | 100 | 62 | 18 | 34 |
| 16 | Muthammal | 35 | 59⅛ | 70 | 50 | 120 | 54 | 18 | 30 | 60 | 40 | 100 | 53 | 18 | 11 |
| 17 | V. P. Ramasamy | 23 | 17 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | R. Nallasamy . . . . | 15 | 27 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 19 | Palaniyathal . . . . | 14 | 59⅛ | 67 | 61 | 128 | 57 | 18 | 20 | 60 | 40 | 100 | 41 | 19 | 10 |
| 20 | K. R. Palanisamy . . . | 22 | 55 | 68 | 60 | 128 | 67 | 17 | 30 | 50 | 46 | 96 | 40 | 18 | .. |
| 21 | K. S. Rangasamy . . . | 23 | 51¼ | 69 | 59 | 128 | 112 | 18 | 30 | 38 | 30 | 68 | 18 | 45 | 12 |
| 22 | K. Chinnusamy. . . . | 20 | 46¼ | 59 | 69 | 128 | 57 | 17 | .. | 52 | 48 | 100 | 56 | 18 | .. |
| 23 | K. P. Vanjiyathal . . . | 14 | 45⅛ | 68 | 60 | 128 | 42 | 18 | 8 | 55 | 45 | 100 | 36 | 10 | 10 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 1518 | 872 |  |  |

No. 55.
Name of Parishramalaya : Veerapandy (Madras State)

Date of starting 9-2-56
Number of Charkha sets : 20

| S. No. | Name of operative | Class of spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 |  |  |  |  |  | From 28th March 56 to 13th April 56 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  | Age |  | Carding | Spg. | Total hanks | Prodn. | Count | Loss Tolas | Carding. | Spg. | Total hanks | Prodn. | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P. Theivathal . . . . . | 17 | 91 | 70 | 50 | 120 | 108 | 16 | 6 | 70 | 50 | 120 | 139 | 16 | 4 |
| 2 | K. Parvathi . . . . . | 16 | 77 | 25 | 15 | 40 | 29 | 20 | 10 | 30 | 34 | 64 | 71 | 20 | 5 |
| 3 | Muthayal . . . . . | 24 | 89 | 64 | 40 | 104 | 121 | 18 | 4 | 68 | 52 | 120 | 156 | 18 | 3 |
| 4 | Nachiamal . . . . . | 24 | 86 | 60 | 60 | 120 | 113 | 15 | 24 | 50 | 54 | 104 | 101 | 17 | 20 |
| 5 | Valiathal . . . . . | 16 | 87 | 75 | 45 | 120 | 102 | 18 | 6 | 60 | 52 | 112 | 120 | 19 | 5 |
| 6 | Samathal . . . . . | 18 | 2 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 7 | M. Sivathal . . . . . | 16 | 34 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8 | A. Muthalkhasina . . . . | 16 | 88 | 73 | 47 | 120 | 112 | 17 | 13 | 66 | 54 | 120 | 124 | 19 | 12 |
| 9 | Sumbalkhami . . . . . | 13 | 86 | 71 | 49 | 120 | 112 | 18 | 25 | 64 | 56 | 120 | 124 | 16 | 34 |
| 10 | N. Nithathal . . . . . | 14 | 71 | 20 | 38 | 48 | 22 | 18 | 6 | 40 | 40 | 80 | 70 | 16 | 4 |
| 11 | Govindthal . . . . . | 18 | 85 | 65 | 55 | 120 | 118 | 20 | 6 | 62 | 58 | 120 | 146 | 17 | 5 |
| 12 | K. Ammanimal . . . . | 18 | 83 | 62 | 50 | 112 | 120 | 16 | 10 | 60 | 60 | 120 | 144 | 19 | 9 |
| 13 | L. Thivavathal . . . . . | 16 | 55 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 14 | Savainathal . . . . . | 15 | 83 | 60 | 78 | 138 | 78 | 19 | 10 | 62 | 50 | 112 | 96 | 18 | 10 |
| 15 | P. Amamimal . . . . . | 15 | 71 | 57 | 55 | 112 | 81 | 20 | 6 | 58 | 54 | 112 | 109 | 17 | 4 |
| 16 | Ponnammal . . . . . | 20 | 41 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 17 | Ruchkmani . . . . . | 17 | 62 |  |  |  |  |  |  |  |  |  |  |  |  |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Sarasiammal . . . . | 16 | 80 | 50 | 62 | 112 | 64 | 10 | 11 | 40 | 40 | 80 | 77 | 16 | 6 |
| 19 | Palamiathal . . . . | 16 | 80 | 40 | 48 | 88 | 50 | 16 | 36 | 54 | 50 | 104 | 104 | 16 | 46 |
| 20 | Lukshmi . . . . | 15 | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 21 | Machhamal . . . . | 16 | 67 | 55 | 49 | 104 | 60 | 17 | 16 | 40 | 40 | 80 | 67 | 18 | 14 |
| 22 | Rajamal . . . . | 16 | 58 | 48 | 40 | 88 | 31 | 15 | 33 | 34 | 30 | 64 | 61 | 19 | 37 |
| 23 | Nishamani . . . . | 19 | 68 | 60 | 52 | 112 | 84 | 15 | 16 | 50 | 96 | 146 | 98 | 18 | 14 |
| 24 | Mayilathal . . . . | 16 | 38 | | | | | | | | | | | | |
| 25 | Actuathal . . . . | 19 | 52 | 34 | 30 | 64 | 32 | 16 | 7 | | | | | | |
| 26 | Subathal . . . . | 30 | 57 | | | | | | | | | | | | |
| 27 | Kaliyamal . . . . | 30 | 75 | 60 | 60 | 120 | 116 | 20 | 26 | 50 | 54 | 104 | 96 | 22 | 24 |
| 28 | Sinnagovindthal . . . | 17 | 76 | 60 | 52 | 112 | 91 | 16 | 40 | 60 | 60 | 120 | 117 | 24 | 13 |
| 29 | Shammathal . . . . | .. | 33 | | | | | | | 48 | 40 | 88 | 70 | 17 | 35 |
| 30 | Muthayal . . . . | .. | 30 | | | | | | | 40 | 40 | 80 | 48 | 17 | 55 |
| 31 | Unnathal . . . . | .. | 9 | | | | | | | | | | | | |
| 32 | Saraswati . . . . | .. | 18 | | | | | | | | | | | | |
| 33 | Palaniathal . . . . | .. | 36 | 60 | 60 | 120 | 70 | 16 | 10 | | | | | | |
| 34 | Valiathal . . . . | .. | 44 | 50 | 54 | 104 | 61 | 17 | 21 | 50 | 54 | 104 | 94 | 16 | 10 |
| 35 | Subbathal . . . . | .. | 18 | | | | | | | | | | | | |
| 36 | Valliathal . . . . | .. | 18 | | | | | | | | | | | | |
| 37 | Sathalukshami . . . | .. | 43 | 45 | 51 | 96 | 54 | 16 | 11 | 30 | 40 | 70 | 53 | 16 | 43 |
| 38 | Arputhaman . . . . | .. | 38 | 42 | 46 | 88 | 56 | 16 | 33 | 50 | 46 | 96 | 66 | 15 | 38 |
| | TOTAL. | | | | | | | | | | | 2616 | 2488 | | |

Name of Parishramalaya : Sadapalayance

Date of Starting : 23-1-56

Number of Charkha sets: 23

Keedadam Vastralayam
Kundadam (P.O.) Via.
Coimbatore Distt. (Madras)

| S. No. | Name of operative | Class of spinner | No. of days of atten-dance | From 10th March 56 to 27th March, 56 | | | | | | From 28th March, 56 to 15th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | Carding | Spinning | Total | Prodn. (Hanks) | Count | Loss (Tolas) | Carding | Spinning | Total | Prodn. (Hanks) | Count | Loss (Tolas) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Dhanalakshmi . . . | 20 F | 69 | 44 | 56 | 100 | 72 | 18 | 1-11 | 52·30 | 60 | 112·30 | 83 | 18 | 0-22 |
| 2 | Sulochana . . . . | 16 F | 71 | 45·45 | 63·15 | 109 | 84 | 18 | 2-2 | 53·34 | 59·30 | 113·15 | 104 | 18 | 1-28 |
| 3 | Meenambal . . . | 18 F | 71 | 47·15 | 63·45 | 111 | 114 | 18 | 1-30 | 51·30 | 62 | 113·10 | 137 | 18 | 1-15 |
| 4 | Palaniyammal . . . | 18 F | 71 | 45·45 | 63 | 108·45 | 106 | 18 | 2-5 | 52·45 | 60·30 | 113·15 | 122 | 18 | 0-20 |
| 5 | Parvathammal . . . | 30 F | 71 | 47 | 61 | 108 | 76 | 18 | 1-12 | 52·45 | 60·15 | 113 | 1 | 18 | 1-22 |
| 6 | Palanasami . . . . | 14 M | 70 | 48 | 60 | 108 | 85 | 18 | 0-37 | 48 | 57·15 | 105·15 | 83 | 18 | 1-21 |
| 7 | Ponnammal . . . | 16 F | 58 | 30 | 37·30 | 67·30 | 38 | 18 | 0-31 | 44 | 49·30 | 93·30 | 54 | 18 | 0-30 |
| 8 | Kamalam . . . . | 16 F | 69 | 48·15 | 59·50 | 108·05 | 71 | 18 | 0-6 | 48·15 | 57 | 105·15 | 77 | 18 | 0-13 |
| 9 | Palanapahal . . . | 14 F | 47 | 24·30 | 28 | 52·30 | 32 | 18 | 0-26 | 23·30 | 29 | 52·30 | 29 | 18 | 0-20 |
| 10 | Janakaiyammal . . . | 15 F | 55 | 45·30 | 61·15 | 106·35 | 69 | 18 | 1-2 | 1-2 | 9·13 | 22·30 | 16 | 18 | 0-28 |
| 11 | Subbathal . . . . | 14 F | 56 | 45·50 | 62·15 | 107·30 | 59 | 18 | 0-25 | 14·15 | 16 | 30·15 | 18 | 18 | 0-10 |
| 12 | Vallaiyathank . . . | 15 F | 67 | 44 | 63 | 107 | 78 | 18 | 1-17 | 51 | 60·45 | 112·45 | 96 | 18 | 1-6 |
| 13 | Dhadapani . . . | 18 M | 65 | 33·45 | 51·30 | 85·15 | 81 | 18 | 1-5 | 52·15 | 60·45 | 113 | 107 | 18 | 1-1 |
| 14 | Laxami . . . . | 12 F | 64 | 46 | 59·45 | 105·45 | 69 | 18 | 1-16 | 47 | 58 | 105 | 64 | 18 | 0-32 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 Papathi | 16 F | 60 | 43·15 | 62·15 | 105·30 | 51 | 18 | 1-15 | 51 |  | 61·30 | 112·30 | 83 | 18 | 1-32 |
| 16 Valliyathal | 34 F | 60 | 47 | 60·15 | 107·15 | 76 | 18 | 0-18 | 50·30 |  | 62 | 112·30 | 96 | 18 | 1-25 |
| 17 Subbathal | 19 F | 52 | 59·20 | 57·30 | 116·15 | 98 | 18 | 0-16 | 55·40 |  | 60·40 | 116·20 | 132 | 18 | 1-27 |
| 18 Pushpathal | 20 F | 52 | 57·20 | 59·10 | 116·30 | 95 | 18 | 0-25 | 59·20 |  | 57·10 | 116·30 | 122 | 18 | 1-0 |
| 19 Mathuthal | 25 F | 52 | 57·10 | 58·40 | 115·50 | 88 | 18 | 0-21 | 59·50 |  | 57·20 | 117·10 | 119 | 18 | 0-35 |
| 20 Laxami | 18 F | 48 | 43·50 | 41·50 | 85·40 | 64 | 18 | 0-27 | 59 |  | 58·40 | 117·40 | 126 | 18 | 0-28 |
| 21 Divani | 25 F | 51 | 51·50 | 57·30 | 109·20 | 127 | 18 | 0-3 | 57 |  | 61 | 118 | 172 | 18 | 0-34 |
| 22 Parvathammal | 27 F | 52 | 57·10 | 59·20 | 116·30 | 93 | 18 | 0-30 | 58·50 |  | 57·10 | 116 | 122 | 18 | 0-20 |
| 23 Khandasami | 27 M | 50 | 57·50 | 58·30 | 116·20 | 92 | 18 | 0-31 | 55·20 |  | 61·50 | 117·10 | 154 | 18 | 0-1 |
| 24 Muthathal | 20 F | 48 | 59 | 48 | 107 | 49 | 18 | 1-14 | 58·20 |  | 56·30 | 115·10 | 83 | 18 | .. |
| 25 Kittammal | 27 F | 49 | 53·50 | 54·10 | 107·40 | 68 | 18 | 0-26 | 55·10 |  | 60·30 | 115·40 | 93 | 18 | .. |
| 26 Narayanaswami M. | 35 M | 50 | 63·30 | 52·50 | 116·20 | 80 | 18 | 2-26 | 53·50 |  | 52·40 | 116·30 | 132 | 18 | 0-38 |
| 27 Venkatammal | 30 F | 48 | 57 | 58·30 | 115·30 | 69 | 18 | 0-25 | 59·40 |  | 56·40 | 116·20 | 85 | 18 | 0-2 |
| 28 Machammal | 30 F | 47 | 58·50 | 57·20 | 116·10 | 67 | 18 | 1-18 | 54·10 |  | 54·20 | 108·30 | 88 | 18 | 0-25 |
| 29 Drwani | 27 F | 28 | 33 | 40 | 73 | 24 | 18 | 0-8 | .. |  | .. | .. | .. | .. | .. |
| 30 Palaniyammal | 20 F | 48 | 47·40 | 57·30 | 105·10 | 73 | 18 | 0·25 | 59 |  | 57·20 | 116.20 | 88 | 18 | 1-30 |
| 31 Pariasami | 29 M | 45 | 48·40 | 51·40 | 100·20 | 61 | 18 | 0·22 | 56·50 |  | 59·10 | 116 | 81 | 18 | 0-34 |
| 32 Kumarasami | 17 M | 45 | 45·50 | 47·40 | 93·30 | 62 | 18 | 0-21 | 57·60 |  | 58·30 | 116·20 | 92 | 18 | 0-36 |
| 33 Papammal | 25 F | 38 | 59·30 | 55·50 | 115·20 | 49 | 18 | 1-5 | 36·10 |  | 32·20 | 68·30 | 34 | 18 | 1-6 |
| 34 Utani | 14 M | 39 | 38·50 | 38·30 | 77·20 | 40 | 18 | 0-11 | 57 |  | 59·10 | 116·10 | 91 | 18 | 0-24 |
| 35 Arukani | 17 F | 44 | 58·40 | 57·40 | 116·20 | 64 | 18 | 0-10 | 57·50 |  | 58·20 | 115·10 | 78 | 18 | 0-19 |
| 36 Palamal | 15 F | 44 | 59·20 | 56·40 | 116 | 45 | 18 | 0-35 | 59 |  | 56·20 | 115·20 | 65 | 18 | 0-28 |
| 37 Govindammal | 19 F | 44 | 59·20 | 57·20 | 116·40 | 69 | 18 | 0-4 | 57·20 |  | 59·30 | 116·50 | 108 | 18 | 0-17 |
| 38 Arukani | 17 F | 44 | 57·30 | 56·50 | 114·20 | 55 | 18 | 0-37 | 59·30 |  | 55·30 | 115·20 | 67 | 18 | 0-28 |
| 39 Devaki | 20 F | 22 | 38·10 | 37·20 | 75·30 | 29 | 18 | 0-39 | .. |  | .. | .. | .. | .. | .. |
| 40 Palaniyammal | 20 F | 39 | 40·30 | 43·20 | 91.50 | 35 | 18 | 1-0 | 59 |  | 57.30 | 116.30 | 88 | 18 | 0-29 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | Machammal . . . | 15 F | 41 | 58.30 | 56.40 | 115.10 | 46 | 18 | .. | 59.10 | 56·30 | 115.40 | 68 | 18 | 1-0 |
| 42 | Venkatammal . . . | 14 F | 42 | 56.10 | 56.50 | 113 | 50 | 18 | 0-30 | 58.10 | 57·40 | 115.50 | 73 | 18 | 0-34 |
| 43 | Palaniyammal . . . | 17 F | 41 | 58.40 | 49.30 | 100.10 | 38 | 18 | 0.38 | 50.30 | 57·20 | 115.50 | 75 | 18 | 0-15 |
| 44 | Palaniyammal . . . | 15 F | 40 | 53 | 59.30 | 112.30 | 42 | 18 | 1-0 | 54.40 | 55·40 | 100.20 | 68 | 18 | 0-28 |
| | TOTAL . . | | | | | | | | | | | 4485 | 3743 | | |

Date of starting 1-2-56

No. 57
Name of Parishramalaya : PUDUPALAYAM
Madras

| S. No. | Name of operative | Class of Spinner Age | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 1 | Pappayee | 12 | 60 | 68 | 47 | 115 | 31 | 13 | 1 | 61 | 50 | 115 | 52 | 13 | 1 |
| 2 | Muthiyan | 20 | 54 | 63 | 45 | 108 | 23 | 13 | .. | 61 | 49 | 110 | 56 | 13 | .. |
| 3 | P. Shriaivasan | 45 | 40 | 46 | 37 | 83 | 12 | 13 | .. | 61 | 49 | 110 | 56 | 13 | .. |
| 4 | Muthusamy | 20 | 50 | 47 | 41 | 88 | 23 | 13 | .. | 57 | 55 | 112 | 44 | 13 | .. |
| 5 | Chinnamuthu | 16 | 54 | 55 | 54 | 109 | 23 | 13 | 1 | 63 | 50 | 113 | 40 | 13 | 1 |
| 6 | Pavalayee | 15 | 34 | 51 | 50 | 101 | 25 | 13 | 1 | 48 | 43 | 91 | 31 | 13 | 1 |
| 7 | Perumal | 19 | 37 | 46 | 62 | 108 | 25 | 13 | .. | 59 | 55 | 114 | 34 | 13 | 1 |
| 8 | V. Ramasamy | 20 | 25 | 50 | 53 | 103 | 3 | 13 | .. | 26 | 28 | 54 | 14 | 13 | 1 |
| 9 | C. Sengodan | 19 | 43 | 51 | 50 | 101 | 14 | 13 | 1 | 62 | 49 | 111 | 50 | 13 | 1 |
| 10 | K. Sengodan | 18 | 25 | 56 | 53 | 109 | 17 | 12 | .. | 56 | 42 | 98 | 28 | 12 | 1 |
| 11 | Angoammal | 12 | 36 | 77 | 30 | 107 | 9 | 12 | 1 | 58 | 42 | 100 | 22 | 12 | 1 |
| 12 | Muniyammal | 15 | 36 | 9 | 19 | 1 | 7 | 12 | 1 | 64 | 41 | 105 | 16 | 12 | 2 |
| 13 | Kanthayee | 12 | 35 | 65 | 41 | 106 | 10 | 12 | 1 | 56 | 56 | 112 | 22 | 12 | 1 |
| 14 | Chinamma | 12 | 38 | 49 | 35 | 84 | 26 | 13 | .. | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Payace | 15 | 20 | 60 | 21 | 81 | 7 | 13 | 1 | | |
| 16 | M. Pariyasamy | 21 | 37 | 52 | 41 | 93 | 18 | 13 | 1 | | |
| 17 | Marayee | 25 | 3 | | | | | | | | |
| 18 | Pappayee Vadurankuavu | 39 | 2 | | | | | | | | |
| 19 | Thangammal | 15 | 6 | | | | | | | | |
| 20 | Rajammal | 14 | 6 | | | | | | | | |
| 21 | Katujamal | 25 | 17 | | | | | | | | |
| 22 | Thayammal | 12 | 7 | | | | | | | | |
| | TOTAL | | | | | | | | | 1345 | 465 |

No. 58.
Name of Parishramalaya : SANGARAPANDIAPURAM
Distt. Ramnad (S.I.) (Madras).

Number of Charkha sets : 9
Date of starting 2-1-56.

| S. No. | Name of operative | Class of Spinner | No. of days of | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | Age | Trg. | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | K. Krishnaswami . . . . . | 25 | 59½ | 13 | 15 | 28 | 39 | 17 | 18 | | .. | .. | .. | .. | .. |
| 2 | A. Subanaidu . . . . . | 35 | 12½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 3 | K. Perumalsami . . . . | 25 | 89 | 39 | 51 | 90 | 149 | 17 | 40 | 63 | 55 | 118 | 84 | 18 | 43 |
| 4 | N. Nallavanaidu . . . . | 29 | 89 | 39 | 51 | 90 | 160 | 17 | 50 | 64 | 54 | 118 | 88 | 18 | 47 |
| 5 | K. Shankarappan . . . . | 23 | 82 | 31 | 54 | 85 | 115 | 18 | 24 | 62 | 49 | 111 | 126 | 18 | 26 |
| 6 | S. Durairairaju . . . . | 18 | 80 | 32 | 39 | 71 | 83 | 17 | 24 | 53 | 42 | 95 | 111 | 18 | 34 |
| 7 | A. Perumalsami . . . . | 28 | 77½ | 22 | 26 | 48 | 81 | 18 | 14 | 62 | 58 | 120 | 203 | 18 | 19 |
| 8 | K. Ramsami . . . . . | 29 | 87½ | 34 | 43 | 77 | 115 | 18 | 42 | 62 | 51 | 113 | 147 | 18 | 30 |
| 9 | P. Kariamalagar . . . . | 18 | 35 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 10 | K. Vengidasami . . . . | 15 | 41½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 11 | S. Kaliraju . . . . . | 16 | 79 | 30 | 38 | 68 | 93 | 16 | 30 | 57 | 46 | 103 | 106 | 17 | 59 |
| 12 | S. Kelsami . . . . . | 19 | 89 | 39 | 51 | 90 | 154 | 18 | 40 | 63 | 60 | 123 | 179 | 17 | 48 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N. Krishnasami . . . . | 22 | 87½ | 38 | 47 | 85 | 117 | 18 | 50 | 63 | 48 | 111 | 133 | 17 | 67 |
| 14 | N. Zuthiammal . . . . | 20 | 33 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 15 | A. Subalakhim . . . . | 14 | 26 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 16 | R. Koasalai . . . . . | 14 | 67½ | 13 | 20 | 33 | 35 | 10 | 8 | 54 | 44 | 98 | 90 | 16 | 27 |
| 17 | K. Amdall . . . . . | 16 | 78½ | 25 | 30 | 55 | 77 | 16 | 30 | 46 | 36 | 82 | 80 | 16 | 42 |
| 18 | A. Sithalakhami . . . . | 14 | 41 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 19 | K. Sabalakhim . . . . | 14 | 77 | 27 | 37 | 64 | 95 | 16 | 29 | 53 | 43 | 96 | 118 | 17 | 56 |
| 20 | M. Guruvammall . . . . | 14 | 79 | 38 | 48 | 186 | 115 | 16 | 40 | 66 | 54 | 120 | 146 | 18 | 69 |
| 21 | S. Shrinivasan . . . . | 28 | 68 | 35 | 43 | 78 | 135 | 18 | 15 | .. | .. | .. | .. | .. | .. |
| 22 | N. Subaraju . . . . . | 24 | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 23 | G. Krishnasami . . . . | 25 | 77 | 45 | 48 | 93 | 87 | 15 | 40 | 44 | 92 | 96 | 131 | 15 | 50 |
| 24 | D. Tharmaraju . . . . | 19 | 77 | 45 | 51 | 96 | 98 | 16 | 18 | 45 | 51 | 96 | 158 | 16 | 40 |
| 25 | G. Josab . . . . . | 15 | 23 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 26 | M. Kaliraju . . . . . | 15 | 76 | 35 | 47 | 82 | 45 | 13 | 74 | 31 | 46 | 77 | 101 | 13 | 70 |
| 27 | S. Seathu . . . . . | 14 | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 28 | P. Santhattikllai . . . . | 15 | 77 | 32 | 53 | 85 | 62 | 15 | 40 | 25 | 49 | 74 | 94 | 15 | 40 |
| 29 | N. S. Ponnuraju . . . . | 18 | 76 | 40 | 45 | 85 | 79 | 18 | 44 | 46 | 47 | 91 | 119 | 18 | 30 |
| 30 | C. M. Rajan . . . . . | 23 | 71 | 29 | 36 | 65 | 38 | 15 | 30 | 36 | 45 | 81 | 86 | 15 | 30 |
| 31 | P. Katiappan . . . . . | 15 | 10 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 32 | A. Seasammall . . . . | 16 | 36 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 33 | R. Achammall . . . . | 14 | 74 | 35 | 44 | 79 | 37 | 18 | 30 | 13 | 34 | 47 | 47 | 18 | 31 |
| 34 | N. Mariammall . . . . | 21 | 73½ | 39 | 45 | 84 | 90 | 15 | 59 | 39 | 52 | 91 | 116 | 15 | 60 |
| 35 | S. Mariamma . . . . | 20 | 72 | 47 | 47 | 94 | 104 | 16 | 70 | 39 | 46 | 85 | 129 | 16 | 60 |
| 36 | S. Lakshami . . . . . | 18 | 70 | 43 | 43 | 89 | 92 | 16 | 38 | 45 | 51 | 96 | 125 | 16 | 40 |
| 37 | G. Subammal . . . . . | 12 | 25 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 38 | G. Marianimal . . . . | 15 | 77 | 43 | 49 | 92 | 70 | 16 | 33 | 42 | 51 | 93 | 87 | 16 | 35 |
| 39 | G. Amnathan . . . . . | 17 | 36 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 40 | K. Kasiammall . . . . | 14 | 38½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 41 | R. Gopal . . . . . | 35 | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42 | P. Rajammall | 17 | 54 | 37 | 42 | 79 | 57 | 18 | 34 | 38 | 53 | 91 | 89 | 18 | 37 |
| 43 | Ganapprakasam | 45 | 5 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 44 | S. Sundaraju | 20 | 21 | 18 | 18 | 36 | 39 | 18 | 33 | 42 | 47 | 89 | 141 | 18 | 35 |
| 45 | A. Ramlaxmi | 24 | 4 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | . |
| 46 | Subbah | 20 | 3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 2515 | 3229 |  |  |

Name of Parishramalaya : Karivalamvandanallur,
Madras State.

Date of starting 31-1-56

| S. No. | Name of operative | Class of Spinners | No. of days of Atten-dance | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | K. Laxmi . . . . . . | 24 F | 50 | 40 | 32 | 72 | 46 | 13 | 25 | 43¼ | 40¾ | 84 | 86 | 13 | 42 |
| 2 | M. Muthammal . . . . . | 22 F | 51 | 65½ | 46½ | 112 | 69 | 14 | 22 | 98¼ | 45¾ | 104 | 116 | 14 | 49 |
| 3 | Madathi Ammal . . . . . | 30 F | 21 | .. | .. | .. | .. | .. | .. | 22½ | 25½ | 48 | 60 | 15 | 9¾ |
| 4 | Pechi Ammal . . . . . . | 21 F | 50 | 61¾ | 50¼ | 112 | 58 | 14 | 30 | 50½ | 49½ | 100 | 96 | 15 | 15½ |
| 5 | Krishna Ammal . . . . . | 17 F | 49 | 60½ | 53½ | 112 | 79 | 14 | 42 | 45½ | 42½ | 88 | 92 | 14 | 67 |
| 6 | Mupidathi . . . . . . | 31 F | 45 | 60¾ | 34¾ | 104 | 91 | 16 | 84 | 64¾ | 55¼ | 111 | 123 | 15 | 40 |
| 7 | Sankili Ammal. . . . . . | 23 F | 50 | 59½ | 104 | 66 | 66 | 15 | 9 | 56¼ | 51¾ | 102 | 102 | 16 | 1 |
| 8 | Muthiah . . . . . . . | 12 M | 60 | 68 | 35 | 116 | 68 | 15 | 48 | 38½ | 33½ | 72 | 75 | 14 | 15 |
| 9 | Ma. Parvathi . . . . . . | 13 F | 57 | 79½ | 48¾ | 120 | 106 | 13 | 37 | 64 | 88 | 112 | 99 | 12 | 75 |
| 10 | Ma. Muthammal . . . . . | 20 F | 57 | 79 | 41 | 120 | 102 | 13 | 39 | 65¼ | 43½ | 108 | 99 | 13 | 71 |
| 11 | Mari Ammal . . . . . . | 30 F | 60 | 70 | 50 | 120 | 77 | 14 | 39 | 58½ | 49½ | 108 | 111 | 14 | 92 |
| 12 | Andiappan . . . . . . | 13 M | 60 | 68½ | 37½ | 116 | 71 | 14 | 42 | 52¾ | 39¼ | 92 | 54 | 14 | 20 |
| 13 | K. Muthammal . . . . . | 16 F | 38 | 68 | 46 | 112 | 68 | 18 | 68 | 39 | 29 | 68 | 65 | 14 | 42 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | Vellai Ammal | 20 F | 61 | 70¾ | 41¼ | 112 | 65 | 14 | 14 | 51¾ | 40¼ | 92 | 102 | 15 | 36 |
| 15 | R. Sidhai Ammal | 19 F | 62 | 70 | 46 | 116 | 78 | 14 | 35 | 49½ | 42¾ | 92 | 107 | 13 | 2 |
| 16 | R· Kothi Ammal | 30 F | 62 | 72½ | 46¾ | 120 | 79 | 14 | 20 | 50¼ | 41¾ | 92 | 102 | 15 | 25 |
| 17 | Selvathi | 16 F | 39 | 44 | 47 | 91 | 36 | 14 | 24 | 16½ | 11½ | 28 | 21 | 13 | 31 |
| 18 | Pichammal | 14 F | 57 | 62¾ | 53¼ | 116 | 104 | 13 | 68 | 65¾ | 50¼ | 116 | 115 | 11 | 71 |
| 19 | Vellaisamy | 15 M | 60 | 55 | 53 | 108 | 23 | 15 | 36 | 38¾ | 45½ | 84 | 91 | 20 | 58 |
| 20 | Sellaiah | 26 M | 59 | 55¾ | 40¼ | 95 | 70 | 16 | 48 | 88¾ | 39¼ | 68 | 3 | 16 | 10 |
| 21 | Sundara Raj | 21 M | 57 | 66½ | 37½ | 104 | 84 | 16 | 55 | 52½ | 47¾ | 100 | 104 | 14 | 42 |
| 22 | Thangasamy | 20 M | 58 | 68¼ | 43¾ | 112 | 92 | 14 | 56 | 51½ | 48½ | 100 | 107 | 15 | 40 |
| 23 | Muniandi | 22 M | 62 | 69 | 39 | 108 | 79 | 14 | 59 | 52 | 52 | 54 | 115 | 15 | 29 |
| 24 | Iglusamy | 13 M | 21 | 59¾ | 10½ | 40 | 19 | 13 | 27 | .. | .. | .. | .. | .. | .. |
| 25 | Sundaram | 18 M | 17 | 27¼ | 12¾ | 40 | 23 | 16 | 22 | .. | .. | .. | .. | .. | .. |
| 26 | S. Subbiah | 20 M | 26 | 52 | 44 | 96 | 70 | 16 | 40 | 40½ | 39½ | 80 | 83 | 16 | 10 |
| 27 | Piramu Ammal | 25 F | 63 | 36 | 28 | 64 | 53 | 17 | 18 | 50 | 42 | 92 | 102 | 16 | 20 |
| 28 | S. Komathi | 30 F | 61 | 81 | 37 | 118 | 90 | 14 | 24 | 62½ | 37½ | 100 | 90 | 15 | 20 |
| 29 | V. Muthammal | 22 F | 64 | 75 | 43 | 118 | 106 | 20 | 30 | 58 | 46 | 105 | 126 | 17 | 2 |
| 30 | Nainar | 17 F | 60 | 60 | 43½ | 81¾ | 50 | 16 | 20 | 11½ | 12½ | 24 | 22 | 16 | 7 |
| 31 | B. Parvathi | 19 F | 62 | 65½ | 44½ | 110 | 69 | 17 | 24 | 27½ | 25½ | 60 | 90 | 16 | 39 |
| 32 | S. Muthammal | 23 F | 53 | 72 | 34 | 106 | 64 | 14 | 27 | 53½ | 34½ | 87¾ | 80 | 14 | 39 |
| 33 | R. Mari Ammal | 17 F | 59 | 78½ | 33½ | 112 | 66 | 16 | 29 | 60 | 48 | 108 | 70 | 16 | 3 |
| 34 | A. Makamayi | 30 F | 59 | 66 | 40 | 106 | 64 | 14 | 22 | 54 | 42 | 96 | 86 | 15 | 18½ |
| 35 | V. Vadivu | 17 F | 62 | 48 | 32 | 80 | 41 | 16 | 12 | 52½ | 27½ | 80 | 48 | 13 | 52½ |
| 36 | Madathi | 13 F | 61 | 80½ | 33½ | 114 | 58 | 13 | 26 | 52 | 32 | 84 | 55 | 14 | 7 |
| 37 | N. Laxmi | 16 F | 62 | 73 | 41 | 114 | 76 | 11 | 32 | 54½ | 45½ | 100 | 101 | 16 | 32 |
| 38 | Raja Laxmi | 16 F | 62 | 67¼ | 38½ | 105½ | 51 | 13 | 19 | 58 | 34 | 92 | 47 | 13 | 19 |
| 39 | Ambujam | 17 F | 63 | 71 | 47 | 118 | 63 | 17 | 24 | 69 | 39 | 108 | 82 | 16 | 30 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | Baby | 16 F | 63 | 64½ | 41½ | 106 | 62 | 16 | 28 | 71 | 37 | 108 | 67 | 14 | 15 |
| 41 | Puliyuran | 20 M | 17 | 23½ | 24½ | 48 | 23 | 16 | 8 | 13½ | 26½ | 40 | 21 | 16 | 1 |
| 42 | Rajagopalan | 17 M | 62 | 74½ | 41½ | 116 | 75 | 14 | 29 | 59 | 35 | 92 | 72 | 15 | 38 |
| 43 | A. Laxmi | 22 F | 49 | 32 | 32 | 64 | 45 | 18 | 18 | 9 | 15 | 24 | 23 | 13 | 20 |
| 44 | Karupai Ammal | 20 F | 58 | 70½ | 39½ | 110 | 52 | 14 | 22 | 60 | 36 | 96 | 63 | 13 | 30 |
| 45 | K. Ganapathy | 17 M | 61 | 62 | 34 | 96 | 12 | 14 | 15 | 59½ | 36½ | 96 | 66 | 11 | 26 |
| 46 | Vinayakam | 20 M | 54 | 79½ | 37½ | 116 | 78 | 16 | 34 | 69 | 43 | 112 | 100 | 16 | 34½ |
| 47 | Ve. Muthammal | 30 F | 63 | 81½ | 34½ | 116 | 62 | 14 | 19 | 56½ | 42½ | 108 | 89 | 13 | 66 |
| 48 | Laxmi | 21 F | 60 | 76½ | 39½ | 116 | 62 | 14 | 19 | 67 | 41 | 108 | 90 | 13 | 52 |
| 49 | Arumugam | 19 M | 50 | 62½ | 25½ | 88 | 35 | 12 | 20 | 17½ | 14½ | 32 | 27 | 13 | 46 |
| 50 | Subramaniam | 21 M | 42 | 43½ | 28½ | 72 | 50 | 13 | 26 | 45½ | 34½ | 80 | 96 | 13 | 50 |
| 51 | S. Parvathi | 23 F | 60 | 71 | 47 | 118 | 95 | 17 | 25 | 55 | 45 | 100 | 81 | 14 | 18 |
| 52 | V. Muthiaha | 17 M | 29 | 10 | 6 | 16 | 13 | 14 | 2 | .. | .. | .. | .. | .. | .. |
| 53 | M. Muthammal | 24 F | 32 | 5½ | 2½ | 8 | 3 | 16 | 1 | .. | .. | .. | .. | .. | .. |
| 54 | Oppachi | 22 F | 58 | 43 | 45 | 88 | 50 | 16 | 7 | .. | .. | .. | .. | .. | .. |
| 55 | K. Kali Ammal | 125 F | 62 | 49 | 33 | 72 | 45 | 13 | 16 | 13 | 7 | 20 | 13 | 13 | 18 |
| 56 | Ganesan | 19 M | 49 | 57½ | 23½ | 88 | 59 | 20 | 11 | .. | .. | .. | .. | .. | .. |
| 57 | Raju | 23 M | 16 | 34 | 36 | 90 | 30 | 13 | 7 | 8 | 4 | 12 | 5 | 13 | 38 |
| | TOTAL | | | | | | | | | | | 4,323 | 4,011 | | |

Name of Parishramalaya Kunnur Ambar Parishramalaya
Kunnur P.O
Via Srivilliputtur
Ramanad Dt. (Madras)

| Sl. No. | Name of operative | Class of spinner | No. of days of attendance | From 10th March, 56 to 27th March, 56 |  |  |  |  |  | From 28th Mar |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (Hours) |  |  |  |  |  | Duration of work (Hours) |  |  |  |  |  |
|  |  |  |  | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | S. Rajaraman | 23 M | 83 | 49 | 61 | 110 | 128 | 22 | 25 | 49 | 62 | 111 | 133 | 22 | 25 |
| 2 | S. Trirumali | 20 F | 83 | 42 | 65 | 107 | 140 | 20 | 31 | 42 | 169 | 111 | 158 | 20 | 31 |
| 3 | K. Punnavanam | 26 M | 72 | 34 | 37 | 71 | 79 | 22 | 20 | 32 | 45 | 77 | 82 | 21 | 16 |
| 4 | T. Soviarraj | 30 M | 65 | 38 | 43 | 81 | 87 | 20 | 25 | 30 | 32 | 62 | 64 | 21 | 14 |
| 5 | T. Venkataswamy | 20 M | 75 | 95 | 84 | 179 | 103 | 23 | 32 | 36 | 68 | 104 | 125 | 23 | 37 |
| 6 | T. Muthuswamy | 19 M | 77 | 74 | 68 | 142 | 93 | 21 | 25 | 28 | 38 | 66 | 59 | 21 | 16 |
| 7 | M. Pathrakalimmal | 17 F | 83 | 78 | 69 | 147 | 87 | 20 | 23 | 46 | 64 | 110 | 107 | 22 | 14 |
| 8 | T. Manghathai | 23 F | 82 | 103 | 96 | 199 | 104 | 23 | 26 | 49 | 59 | 108 | 85 | 21 | 25 |
| 9 | K. Mariammal | 16 F | 82 | 93 | 87 | 180 | 75 | 24 | 19 | 52 | 54 | 106 | 95 | 23 | 27 |
| 10 | A. Suthaiammal | 45 F | 81 | 97 | 96 | 193 | 80 | 20 | 22 | 54 | 50 | 104 | 95 | 20 | 32 |
| 11 | S. Sonnam | 17 M | 5 | .. | — | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 12 | A. Andal | 12 M | 77 | 103 | 97 | 200 | 103 | 23 | 29 | 49 | 56 | 105 | 86 | 22 | 24 |
| 13 | S. Gracemary | 15 F | 61 | 105 | 95 | 200 | 91 | 23 | 36 | 35 | 37 | 72 | 77 | 20 | 21 |
| 14 | S. Pappammal | 40 F | 15 | .. | .. | .. | .. | .. | .. |  |  | — | .. | .. | .. |
| 15 | P. Sundaramal | 17 F | 74 | 83 | 96 | 179 | 84 | 20 | 28 | 17 | 19 | 36 | 34 | 22 | 11 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | S. Sinnammal | 35 F | 81 | 103 | 99 | 202 | 107 | 23 | 32 | 52 | 53 | 105 | 145 | 22 | 37 |
| 17 | K. Muthammal | 26 F | 75 | 101 | 95 | 196 | 104 | 22 | 36 | 30 | 32 | 62 | 77 | 21 | 25 |
| 18 | S. Rajammal | 10 F | 82 | 87 | 90 | 177 | 80 | 25 | 19 | 45 | 58 | 103 | 85 | 22 | 24 |
| 19 | A. Eswaravadium | 11 M | 83 | 99 | 83 | 182 | 87 | 22 | 27 | 49 | 57 | 106 | 84 | 21 | 31 |
| 20 | S. Karuppayee | 10 M | 24 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 21 | K. Seeniammal | 13 F | 88 | 99 | 93 | 192 | 103 | 22 | 29 | 42 | 44 | 86 | 88 | 22 | 30 |
| 22 | M. Sangili | 21 M | 63 | 89 | 102 | 191 | 102 | 21 | 38 | 49 | 43 | 92 | 88 | 24 | 23 |
| 23 | V. Narayanan | 38 M | 59 | 63 | 68 | 131 | 71 | 21 | 27 | 48 | 52 | 100 | 141 | 23 | 38 |
| 24 | S. Sargaranarayanan | 23 M | 57 | 73 | 67 | 140 | 85 | 23 | 21 | 52 | 49 | 101 | 100 | 24 | 32 |
| 25 | N. Rangaswamy | 21 M | 54 | 102 | 93 | 195 | 107 | 22 | 39 | 31 | 34 | 65 | 79 | 24 | 19 |
| 26 | V. Gopalaswamy | 25 M | 59 | 68 | 73 | 141 | 89 | 20 | 27 | 36 | 44 | 80 | 84 | 21 | 23 |
| 27 | P. G. Guruswa my | 27 M | 59 | 75 | 69 | 124 | 89 | 21 | 32 | 48 | 54 | 102 | 100 | 24 | 27 |
| 28 | P. Venkataswamy | 23 M | 59 | 49 | 58 | 107 | 69 | 20 | 30 | 44 | 53 | 97 | 104 | 23 | 32 |
| 29 | S. V. Kannan | 23 M | 59 | 73 | 67 | 140 | 80 | 23 | 25 | 47 | 56 | 103 | 105 | 20 | 29 |
| 30 | S. Sanjeeviraj | 21 M | 59 | 65 | 73 | 138 | 80 | 24 | 21 | 44 | 51 | 95 | 103 | 20 | 23 |
| 31 | S. Mani | 20 M | 58 | 107 | 93 | 200 | 129 | 21 | 38 | 37 | 35 | 72 | 79 | 21 | 21 |
| 32 | P. Kamalpatcha | 24 M | 56 | 73 | 68 | 141 | 80 | 23 | 27 | 49 | 46 | 95 | 75 | 20 | 19 |
| 33 | R. Alwar | 23 M | 47 | 74 | 69 | 143 | 75 | 24 | 32 | 34 | 36 | 70 | 71 | 20 | 21 |
| 34 | A. Saroja | 13 F | 58 | 20 | 23 | 43 | 39 | 24 | 19 | 48 | 51 | 99 | 85 | 21 | 19 |
| 35 | S. Sankaramoorthy | 13 M | 59 | 73 | 68 | 141 | 85 | 25 | 38 | 39 | 51 | 90 | 83 | 20 | 22 |
| 36 | R. Ranganayagi | 22 F | 59 | 34 | 22 | 56 | 57 | 23 | 37 | 42 | 48 | 90 | 87 | 21 | 20 |
| 37 | E. Kowsalya | 18 F | 59 | 32 | 27 | 59 | 57 | 24 | 39 | 56 | 62 | 118 | 150 | 22 | 45 |
| 38 | E. Mariammal | 22 F | 59 | 31 | 29 | 60 | 58 | 22 | 47 | 38 | 42 | 80 | 84 | 22 | 24 |
| 39 | R. P. Vijalakshmi | 25 F | 58 | 28 | 32 | 60 | 56 | 23 | 38 | 34 | 36 | 70 | 72 | 20 | 20 |
| 40 | R. Rajam | 35 F | 59 | 30 | 31 | 61 | 60 | 22 | 39 | 36 | 42 | 78 | 83 | 20 | 22 |
| 41 | Guruviah | 19 F | 45 | 57 | 53 | 110 | 69 | 24 | 28 | 20 | 23 | 43 | 49 | 20 | 12 |
| 42 | Annathammal | 50 F | 43 | 32 | 31 | 63 | 56 | 23 | 27 | 22 | 24 | 46 | 51 | 20 | 13 |
| 43 | Darling Hepziah. | 20 F | 38 | 33 | 30 | 63 | 56 | 22 | 31 | 53 | 59 | 112 | 141 | 20 | 37 |
| | TOTAL | | | | | | | | | | | | | | |

Name of Parishramalaya M. Reddiayapatty
Via. Aruppukkotty
Ramanand Dt. (Madras.)

| Sl. No. | Name of Operative | Class of spinner | | No. of days of attendance | From 10th March, 56 to 27th March, 57 | | | | | | From 28th March, 56 to 13 April, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P. R. S. Gandhi | 18 | M | 4 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 2 | N. S. Ramaiha | 24 | M | 40 | 48 | 48 | 96 | 94 | 24 | 23 | 60 | 60 | 100 | 140 | 22 | 140 |
| 3 | S. S. Srinivasan | 40 | M | 44 | 48 | 48 | 96 | 88 | 23 | 22 | 58 | 62 | 120 | 109 | 18 | 45 |
| 4 | V. S. Dhanushkody | 27 | M | 44½ | 51 | 65 | 116 | 123 | 24 | 26 | 22 | 26 | 48 | 43 | 21 | 15 |
| 5 | V. L. Venkidasablu | 23 | M | 53½ | 50 | 68 | 116 | 103 | 24 | 26 | 50 | 54 | 104 | 99 | 20 | 34 |
| 6 | R. Guruswamy | 25 | M | 55 | 53 | 63 | 116 | 99 | 23 | 25 | 34 | 38 | 72 | 65 | 20 | 21 |
| 7 | R. Jagannathan | 17 | M | 49 | 51 | 65 | 116 | 99 | 23 | 25 | 34 | 38 | 72 | 65 | 20 | 21 |
| 8 | K. P. A. Subbu | 32 | M | 20½ | 24 | 28 | 52 | 36 | 22 | 12 | .. | .. | .. | .. | .. | .. |
| 9 | G. Linguswamy | 19 | M | 41½ | 48 | 52 | 100 | 86½ | 23 | 25 | 50 | 54 | 104 | 102 | 18 | 41 |
| 10 | S. Ramaswamy | 35 | M | 43 | 46 | 66 | 112 | 64½ | 20 | 21 | 30 | 34 | 64 | 45 | 18 | 18 |
| 11 | R. Bose | 23 | M | 36 | 45 | 63 | 108 | 63½ | 20 | 21 | 48 | 52 | 100 | 71 | 20 | 28 |
| 12 | G. Ramaiha | 23 | M | 47½ | 54 | 58 | 112 | 93½ | 22 | 27 | 50 | 54 | 104 | 113 | 20 | 37 |
| 13 | P. S. Chinnathambi | 27 | M | 49 | 54 | 58 | 112 | 93½ | 22 | 27 | 50 | 54 | 104 | 105 | 19 | 31 |
| 14 | A. Subbaramman | 24 | M | 47½ | 46 | 50 | 96 | 82½ | 22 | 27 | 50 | 54 | 104 | 105 | 19 | 31 |
| 15 | S. N. Nallasubbu | 18 | M | 49½ | 48 | 46 | 88 | 72½ | 20 | 23 | 50 | 58 | 108 | 96½ | 19 | 27 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | P.R. Ramachand | 21 | M | 53 | 50 | 54 | 104 | 96½ | 24 | 26 | 56 | 64 | 120 | 109 | 19 | 34 |
| 17 | K. Subbai | 19 | M | 49 | 44 | 48 | 92 | 81 | 22 | 23 | 50 | 54 | 104 | 88 | 19 | 26 |
| 18 | N. Karuppa | 32 | M | 51 | 51 | 53 | 104 | 74 | 23 | 21 | 45 | 51 | 96 | 68 | 21 | 20 |
| 19 | S. Paluswamy | 16 | M | 50½ | 50 | 54 | 104 | 69½ | 23 | 21 | 45 | 51 | 96 | 68 | 21 | 20 |
| 20 | R. Subbu | 29 | M | 53½ | 55 | 57 | 112 | 116 | 25 | 28 | 54 | 62 | 116 | 161 | 25 | 34 |
| 21 | P.P. Kannan | 21 | M | 52 | 42 | 46 | 88 | 84 | 23 | 20 | 56 | 564 | 120 | 135 | 20 | 38 |
| 22 | S. Somaiha | 21 | M | 44½ | 46 | 50 | 96 | 71 | 22 | 21 | 48 | 100 | 84 | 18 | 18 | 22 |
| 23 | V. Venkataraman. | 22 | M | 45 | 44 | 48 | 92 | 78 | 22 | 21 | 48 | 52 | 100 | 84 | 18 | 22 |
| 24 | S. Srinivasan | 23 | M | 37 | 46 | 50 | 96 | 91½ | 23 | 25 | 34 | 38 | 72 | 65 | 18 | 17 |
| 25 | S. Thirumal | 22 | M | 40 | 50 | 54 | 104 | 67 | 22 | 18 | 40 | 44 | 84 | 61 | 18 | 17 |
| 26 | A. Balakrishnan | 16 | M | 30 | 36 | 40 | 76 | 40 | 21 | 13 | .. | .. | .. | .. | .. | .. |
| 27 | T. Naschiyal | 25 | M | 54 | 58 | 62 | 120 | 123 | 19 | 27 | 58 | 62 | 120 | 168 | 21 | 41 |
| 28 | S. Panchaliyammal | 24 | F | 53 | 54 | 58 | 112 | 94 | 21 | 29 | 50 | 58 | 108 | 107 | 18 | 17 |
| 29 | R. Nallammal | 17 | F | 42½ | 50 | 54 | 104 | 80 | 21 | 27 | 52 | 56 | 108 | 188 | 20 | 24 |
| 30 | P. Panthanam | 19 | M | 47½ | 40 | 44 | 84 | 55 | 18 | 20 | 50 | 58 | 108 | 88 | 20 | 24 |
| 31 | R. Chembakam | 21 | F | 47 | 44 | 48 | 92 | 58 | 20 | 21 | 50 | 54 | 104 | 78 | 18 | 24 |
| 32 | K.V.S. Nallammal | 14 | F | 45½ | 36 | 40 | 76 | 53 | 20 | 17 | 45 | 51 | 96 | 81 | 18 | 26 |
| 33 | A. Dhanammal | 25 | F | 47½ | 50 | 54 | 104 | 63 | 20 | 22 | 40 | 44 | 85 | 70 | 19 | 19 |
| 34 | V. Chenkamalam | 27 | F | 44½ | 50 | 58 | 108 | 56½ | 18 | 22 | 36 | 44 | 80 | 53½ | 18 | 15 |
| 35 | N. Sarada | 26 | F | 46 | 48 | 52 | 100 | 55½ | 18 | 21 | 38 | 42 | 80 | 57 | 18 | 18 |
| 36 | Mriyamal | 40 | F | 42½ | 54 | 58 | 112 | 88 | 22 | 25 | 50 | 58 | 108 | 105 | 17 | 27 |
| 37 | P. Ramaswamy | 50 | M | 35 | 48 | 52 | 100 | 71½ | 20 | 22 | 50 | 58 | 108 | 183 | 16 | 24 |
| | TOTAL | | | | | | | | | | | | 3373 | 3143 | | |

Nam e of Prishramalya : Kuliampalayam (Coimbatore-Madras)

Date of starting: 18-2-56
Number of Charkha sets : 8

| Sl. No. | Name of operative | Class of spinner | No. of days of atten-dence | From 10th March, 56 to 27th March,56 Duration of work (hours) Car-ding | Spg. | Total | Prodn. hanks | Co-unt | Loss Tolas | From 28th March, 56 to 13 April, 5 Duration of work (hours) Car-ding | Spg. | Total | Prodn. hanks | Count | Loss Tolar |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Senniyappan | Age<br>24 | 59 | 56 | 64 | 120 | 120 | 18 | 26 | 59 | 61 | 120 | 159 | 20 | 35 |
| 2 | Ponnuswamy | 21 | 71 | 60 | 60 | 120 | 54 | 18 | 13 | 60 | 60 | 120 | 73 | 20 | 15 |
| 3 | Thiruptalthal | 14 | 72 | 50 | 70 | 120 | 51 | 18 | 12 | 70 | 50 | 120 | 73 | 20 | 16 |
| 4 | Muthammal | 15 | 65 | 50 | 70 | 120 | 50 | 18 | 11 | 59 | 61 | 120 | 66 | 20 | 13 |
| 5 | Urumathal | 14 | 69 | 54 | 66 | 120 | 34 | 18 | 10 | 58 | 62 | 120 | 69 | 20 | 15 |
| 6 | Pappamai | 16 | 72 | 50 | 70 | 120 | 79 | 18 | 8 | 51 | 69 | 120 | 127 | 18 | 25 |
| 7 | Veeramai | 35 | 67 | 57 | 63 | 120 | 50 | 20 | 10 | 60 | 60 | 120 | 84 | 18 | 20 |
| 8 | Chokkappan | 26 | 59 | 58 | 62 | 120 | 77 | 20 | 14 | 60 | 60 | 120 | 103 | 18 | 20 |
| 9 | Perujaswamy | 16 | 64 | 60 | 60 | 120 | 47 | 20 | 10 | 56 | 64 | 120 | 70 | 18 | 1 |
| 10 | Lakshmanau | 28 | 46 | 54 | 66 | 120 | 50 | 20 | 12 | 51 | 69 | 120 | 102 | 18 | 20 |
| 11 | Peu'athiruppatha | 25 | 46 | 59 | 61 | 120 | 57 | 20 | 12 | 50 | 70 | 120 | 106 | 18 | 5 |
| 12 | Govindatthai | 18 | 46 | 60 | 60 | 120 | 105 | 20 | 20 | 52 | 60 | 112 | 142 | 18 | 38 |
| 1 | Govindamal | 20 | 46 | 60 | 60 | 120 | 102 | 24 | 20 | 52 | 60 | 112 | 135 | 20 | 26 |
| 14 | Thayalthal | 19 | 46 | 60 | 60 | 120 | 98 | 24 | 18 | 52 | 60 | 112 | 136 | 20 | 21 |
| 15 | Sornathal | 18 | 47 | 54 | 66 | 120 | 80 | 20 | 16 | 54 | 66 | 120 | 115 | 20 | 20 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Ulthanu | 14 | 45 | 55 | 65 | 120 | 69 | 20 | 15 | 48 | 64 | 112 | 101 | 20 | 18 |
| 17 | Paloniswamy | 21 | 44 | 56 | 64 | 120 | 81 | 20 | 20 | 50 | 62 | 112 | 133 | 19 | 28 |
| 18 | T. Govindamal | 19 | 43 | 57 | 63 | 120 | 102 | 20 | 22 | 51 | 61 | 112 | 137 | 19 | 28 |
| 19 | C. Nachammal | 25 | 42 | 61 | 69 | 120 | 82 | 20 | 18 | 60 | 60 | 120 | 120 | 17 | 28 |
| 20 | Nachammal | 12 | 40 | 52 | 69 | 120 | 75 | 20 | 15 | 51 | 61 | 112 | 116 | 17 | 25 |
| 21 | Ruckmani | 18 | 37 | 59 | 61 | 120 | 75 | 20 | 15 | 48 | 64 | 112 | 122 | 17 | 25 |
| 22 | Ponnathal | 12 | 39 | 50 | 70 | 120 | 52 | 19 | 14 | 40 | 70 | 112 | 108 | 17 | 20 |
| | TOTAL | | | | | | | | | | | 2568 | 2391 | | |

ame of Parishramalaya : Nattam·ilasu (Madras)

Date of starting: 8-2-56
No. of Charkha sets: 20

| S. No. | Name of Operative | Class of spinner | From 10th March, 56 to 27th March, 56 | | | | | | | From 28th March,56 to April 13, 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of days of attendance | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Mathathal . . . . | 17 F | 58 | 56 | 56 | 112 | 117 | 14 | 95 | 60 | 60 | 120 | 178 | 16 | .. |
| 2 | Pappathi . . . . . | 15 F | 54 | 56 | 56 | 112 | 92 | 14 | 60 | 60 | 60 | 120 | 101 | 17 | 6 |
| 3 | Kaliathal . . . . . | 13 F | 45 | 56 | 56 | 112 | 65 | 14 | .. | 40 | 40 | 80 | 55 | 14 | .. |
| 4 | Subbathal . . . . | 15 F | 43 | 40 | 40 | 80 | 70 | 14 | 2 | 28 | 28 | 56 | 46 | 13 | 4 |
| 5 | Laxmi . . . . . | 15 F | 52 | 56 | 56 | 112 | 60 | 14 | 62 | 60 | 60 | 120 | 61 | 16 | .. |
| 6 | Govindathal . . . . | 16 F | 50 | 56 | 56 | 112 | 91 | 14 | 33 | 56 | 56 | 112 | 85 | 16 | .. |
| 7 | Hivathal . . . . . | 16 F | 48 | 56 | 56 | 112 | 70 | 14 | 27 | 40 | 40 | 80 | 52 | 16 | .. |
| 8 | Nachathal . . . . | 16 F | 46 | 56 | 56 | 112 | 73 | 14 | 8 | 28 | 28 | 56 | 36 | 17 | 44 |
| 9 | Saraswathy . . . . | 15 F | 51 | 56 | 56 | 112 | 71 | 14 | 15 | 60 | 60 | 120 | 88 | 18 | .. |
| 10 | Laxmi . . . . . | 13 F | 48 | 56 | 56 | 112 | 57 | 14 | 48 | 48 | 48 | 96 | 59 | 13 | .. |
| 11 | Mathathal . . . . | 17 F | 46 | 56 | 56 | 112 | 67 | 14 | 70 | 40 | 40 | 80 | 69 | 15 | .. |
| 12 | Rukmani . . . . | 17 F | 49 | 56 | 56 | 112 | 81 | 14 | 33 | 52 | 52 | 104 | 86 | 17 | .. |
| 13 | Ponnathal . . . . | 12 F | 42 | 40 | 40 | 80 | 40 | 14 | 17 | 48 | 48 | 96 | 60 | 16 | 13 |
| 14 | Nachathal . . . . | 18 F | 42 | 56 | 56 | 112 | 78 | 14 | 17 | 20 | 20 | 40 | 22 | 18 | .. |
| 15 | Govindathal . . . . | 15 F | 63 | 56 | 56 | 112 | 94 | 14 | 41 | 56 | 56 | 112 | 116 | 17 | .. |
| 16 | Nachathal . . . . | 17 F | 51 | 56 | 56 | 112 | 58 | 14 | 18 | 60 | 60 | 120 | 67 | 14 | 15 |
| 17 | Ponnathal . . . . | 16 F | 51 | 56 | 56 | 112 | 55 | 14 | 44 | 36 | 36 | 72 | 40 | 14 | .. |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Parvathi | 17 F | 45 | 44 | 44 | 88 | 61 | 14 | 52 | 60 | 60 | 120 | 96 | 16 | .. |
| 19 | Manickom | 23 F | 47 | 52 | 52 | 104 | 57 | 14 | 22 | 48 | 48 | 96 | 62 | 19 | .. |
| 20 | Janaki | 17 F | 47 | 36 | 36 | 72 | 68 | 14 | 27 | 60 | 60 | 120 | 138 | 20 | 9 |
| 21 | Rukmani | 11 F | 43 | 48 | 48 | 96 | 39 | 14 | 60 | 40 | 40 | 80 | 35 | 16 | 60 |
| 22 | Kaliammal | 40 F | 50 | 56 | 56 | 112 | 55 | 14 | 24 | 56 | 56 | 112 | 68 | 18 | .. |
| 23 | Muthammal | 16 F | 27 | 32 | 32 | 64 | 30 | 14 | 25 | .. | .. | .. | .. | .. | .. |
| 24 | Govindathal | 16 F | 53 | 56 | 56 | 112 | 87 | 14 | 2 | 50 | 50 | 100 | 147 | 14 | .. |
| 25 | Ponnammal | 30 F | 41 | 56 | 56 | 112 | 71 | 14 | .. | 52 | 52 | 104 | 83 | 15 | 19 |
| 26 | Arukathal | 20 F | 25 | 48 | 48 | 96 | 52 | 40 | 35 | .. | .. | .. | .. | .. | .. |
| 27 | Tivathal | 17 F | 38 | 52 | 52 | 104 | 43 | 14 | 36 | 60 | 60 | 120 | 53 | 16 | 41 |
| 28 | Ammani | 20 F | 38 | 48 | 48 | 96 | 44 | 14 | 40 | 60 | 60 | 120 | 75 | 15 | .. |
| 29 | Samathal | 18 F | 16 | 12 | 12 | 24 | 57 | 14 | 41 | 1 | .. | .. | .. | .. | .. |
| 30 | Saraswathy | 15 F | 26 | 48 | 48 | 96 | 44 | 14 | 12 | .. | .. | .. | .. | .. | .. |
| 31 | Muthuswamy | 16 M | 38 | 56 | 56 | 112 | 44 | 14 | 29 | 44 | 44 | 88 | 55 | 14 | 17 |
| 32 | Muthuswamy | 15 M | 36 | 56 | 56 | 112 | 43 | 14 | .. | 36 | 36 | 72 | 41 | 15 | 26 |
| 33 | Palaniswamy | 17 M | 34 | 56 | 56 | 112 | 33 | 14 | 33 | 60 | 60 | 120 | 59 | 17 | 2 |
| 34 | Chinnam | 25 F | 33 | 44 | 44 | 88 | 33 | 14 | 17 | 52 | 52 | 104 | 93 | 19 | 21 |
| 35 | Tivathal | 17 F | 18 | 32 | 32 | 64 | 31 | 14 | 39 | 4 | 4 | 8 | 8 | 18 | .. |
| | TOTAL | | | | | | | | | | | 2948 | 2254 | | |

Name of Parishramalaya : Ambar Charkha Parishramalaya
Atthipakkam (Madras)

Date of starting 25/1/56
No. of Charkha sets 10

| S. No. | Name of operative | Class ofe operativ | Training days | 10/3/56 to 27/3/56 Duration of work (Hrs) | | | | | | 28/3/56 to 13/4/56 Duration of work (Hrs) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Carding | Spinning | Total | Count | Production hanks | Loss Tolas | Carding | Spinning | Total | Count | Production hanks | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Manna Perumad . | (M) | 55 | 42 | 42 | 84 | 12 | 17 | 13 | 48 | 48 | 96 | 16 | 17 | 8 |
| 2 | C. Adimarain . | (M) | 51 | 56 | 56 | 112 | 20 | 52 | .. | 47 | 47 | 94 | 18 | 67 | 5 |
| 3 | Panchajanyan . | (M) | 44 | 44 | 44 | 88 | 13 | 36 | 88 | 12 | 12 | 24 | 10 | 1 | 11 |
| 4 | M. Yelumalai . | (M) | 37 | 24 | 24 | 48 | 10 | 8 | 33 | .. | .. | .. | .. | .. | .. |
| 5 | R. Muniratnam . | | 49 | 40 | 40 | 80 | 20 | 50 | 37 | 36 | 36 | 72 | 20 | 34 | 4 |
| 6 | K. Raman . | | 49 | 52 | 52 | 104 | 14 | 28 | 21 | 52 | 52 | 104 | 16 | 26 | 17 |
| 7 | Tirugnana Sanbandhan | (M) | 36 | 52 | 524 | 104 | 13 | 21 | 16 | 36 | 36 | 72 | 20 | 17 | 12 |
| 8 | Kanyapan . . | (M) | 27 | 36 | 36 | 72 | 13 | 13 | 13 | 36 | 36 | 72 | 20 | 16 | .. |
| 9 | K. Balraman . | (M) | 34 | 48 | 48 | 96 | 20 | 53 | 20 | 8 | 8 | 16 | 13 | 10 | 10 |
| 10 | Natranjan . . | (M) | 41 | 52 | 52 | 104 | 20 | 33 | 38 | 44 | 44 | 88 | 20 | 32 | .. |
| 11 | Chinnraj . . | (M) | 35 | 44 | 44 | 88 | 20 | 19 | 7 | 24 | 24 | 48 | 14 | 11 | 6 |
| 12 | N. Mani . . | (M) | 19 | 28 | 28 | 56 | 13 | 14 | 24 | 24 | 24 | 46 | 16 | 16 | 8 |
| 13 | Arukirti . . | (M) | 25 | 24 | 24 | 48 | 10 | 16 | 31 | 40 | 40 | 80 | 16 | 26 | 5 |
| 14 | Chandrakirti . | (M) | 37 | 44 | 44 | 88 | 20 | 41 | 30 | 48 | 48 | 96 | 20 | 33 | .. |
| 15 | Ratnawel . . | (M) | 35 | 48 | 48 | 96 | 14 | 45 | 18 | 36 | 36 | 72 | 20 | 36 | .. |
| 16 | Neduperumal . | (M) | 10 | 44 | 44 | 88 | 10 | 9 | 30 | 28 | 28 | 56 | 16 | 18 | .. |
| 17 | Chengalrain . | (M) | 14 | 36 | 36 | 72 | 10 | 11 | 22 | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | 1,038 | | 352 | 86 |

Name of Parishramalaya: Jategaon,

No. of charkha sets 30.

| S. No. | Name of operative | Class of Spinner Age | Sex. | No. of days of Trg. | From 10/3/56 to 27/3/56 Duration of work (hours) Carding | Spinning | Total | Production hanks | Loss Tolas | Count | From 28/3/56 to 13/4/56 Duration of work (hours) Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Anandrao Bendkule | 23 | M | 57 | 59⅓ | 48⅓ | 107⅔ | 42 | 22 | 12⅓ | 30⅓ | 35⅓ | 65⅔ | 34 | 24 | 8 |
| 2 | Bhaskar Shinde | 22 | M | 67⅓ | 52⅔ | 48⅔ | 101⅓ | 49 | 25 | 13 | 41⅔ | 53⅔ | 95⅓ | 61 | 25 | 16 |
| 3 | Namdev Shatgir | 29 | M | 54 | 55 | 54 | 109 | 42 | 19 | 11 | 35⅓ | 37⅓ | 70⅔ | 45 | 22 | 12 |
| 4 | Namdev Rakhma | 28 | M | 64 | 59 | 60 | 119 | 93 | 23 | 19 | 39⅓ | 53 | 92⅓ | 60 | 24 | 16⅓ |
| 5 | Baburao Netative | 18 | M | 58⅓ | 72 | 46⅓ | 118⅓ | 55 | 18 | 14 | 20⅓ | 30⅔ | 51⅓ | 31 | 19 | 8 |
| 6 | Devram Soma | 23 | M | 58 | 91⅓ | 36 | 147⅓ | 44 | 20 | 12⅓ | 28⅓ | 30⅔ | 68 | 38 | 24 | 10⅓ |
| 7 | Purushotam Kondaji | 18 | M | 53⅓ | 56 | 41 | 97 | 43 | 22 | 12 | 27⅓ | 37⅓ | 63⅓ | 31 | 17 | 11 |
| 8 | Madhava Balvant | 18 | M | 91 | 90⅔ | 54 | 144⅔ | 45 | 22 | 11 | 47 | 45⅓ | 90⅓ | 57 | 26 | 14 |
| 9 | Motiram Krushna | 15 | M | 55 | 65⅓ | 43⅔ | 109 | 39 | 24 | 12 | 41⅔ | 49 | 90⅔ | 53 | 26 | 12 |
| 10 | Nivruti Kharde | 14 | M | 54⅓ | 65 | 42⅔ | 103⅔ | 40 | 22 | 8 | 28⅓ | 32⅓ | 60⅓ | 33 | 24 | |
| 11 | Sukhddev Pavad | 14 | M | 50⅓ | 90⅓ | 49 | 139⅓ | 25 | 20 | 8 | 9 | 29⅓ | 38⅓ | 13 | 18 | 2⅓ |
| 12 | Nana Jhonabad | 23 | M | 45 | 59⅓ | 36⅓ | 96 | 28 | 23 | 7 | 41 | 46⅔ | 87⅔ | 42 | 24 | 10⅓ |
| 13 | Ranganath Sutar | 17 | M | 55 | 90 | 48⅓ | 138⅓ | 22 | 19 | 10 | 27⅓ | 37 | 64⅓ | 31 | 24 | 8 |
| 14 | Mahadu Uma Sutar | 14 | M | 43 | 97⅓ | 35⅓ | 133 | 30 | 19 | 4 | 40 | 51 | 91 | 31 | 19 | 10 |
| 15 | Nathu Netavate | 14 | M | 40 | 91 | 47⅓ | 138⅓ | 17 | 20 | 19 | 19 | 35⅔ | 54⅔ | 16 | 22 | 3⅓ |
| 16 | Gopala Dada | 15 | M | 51 | 62⅓ | 36 | 98⅓ | 56⅓ | 23 | .. | 37⅓ | 42⅓ | 79⅔ | 55 | 24 | 15 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Krushna Jhambak | 22 | M | 38 | 59½ | 55¾ | 114¾ | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 18 | Utam Totaram | 20 | M | 30¾ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 19 | Rama Jhambak | 25 | M | 35 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 20 | Lilabai Sinde | 16 | M | 41 | 38 | 18 | 56 | 56 | 19 | 13 | 34 | 47¾ | 81½ | 52 | 25 | 13 |
| 21 | Jagannath Gulba | 16 | M | 33 | 65¾ | 53 | 118¾ | 118¾ | 18 | 12 | 44½ | 55¾ | 99¾ | 60 | 21 | 17 |
| 22 | Karimkhan Pathan | 18 | M | 28 | 57 | 44 | 101 | 101 | 16 | 10 | 30½ | 37¾ | 82 | 41 | 24 | 11¾ |
| 23 | Sadashiv Sinda | 29 | M | 27 | 94¾ | 40 | 134¾ | 134¾ | .. | 11¾ | 44½ | 28 | .. | .. | .. | .. |
| 24 | Satyanarayan Oza | 19 | M | 24 | 50½ | 42½ | 92¾ | 92¾ | 12¾ | 12¾ | 25¾ | 54 | 33¾ | 26 | 26 | 8 |
| 25 | Hrishchandra Mane | 17 | M | 29 | 59 | 49 | 108 | 108 | 20 | 11¾ | 46½ | .. | 100½ | .. | .. | .. |
| 26 | Yashwant Dayal | 19 | M | 28 | 59¾ | 50 | 109½ | 10¾ | .. | .. | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | | 1749 | 997 | .. | .. |

Name of Parishramalya: Maindarg,
Distt. Sholapur.

Date of starting 1-12-55
Number of sets : 37.

| S. No | Name of operative | Class of spinner | | No. of days of attend-ance | 28th March 1956 to April 13, 1956 Duration of work (hours) | | | Prodn. Hanks | Count | Loss Tolas |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Carding | Spinning | Total | | | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | Age | Sex | | | | | | | |
| 1 | Ratnabhai Kirnally | 45 | F | 91 | 46 | 37 | 83 | 41 | 20 | 12 |
| 2 | Ratnabhai S. Umaragi | 35 | F | 97 | 36 | 42 | 78 | 42 | 13 | 13 |
| 3 | Kotaravva B. Sengade | 45 | F | 97 | 30 | 54 | 84 | 60 | 14 | 18 |
| 4 | Gangavva Halgude | 60 | F | 97 | 39 | 40 | 79 | 32 | 12 | 12 |
| 5 | Ambavva Dankar | 30 | F | 96 | 32 | 49 | 81 | 64 | 16 | 20 |
| 6 | Kalavva Dankar | 30 | F | 95 | 37 | 41 | 78 | 60 | 14 | 22 |
| 7 | Abdulshah Jamadar | 25 | M | 86 | 38 | 40 | 73 | 52 | | |
| 8 | Nataka Hanmure | 18 | M | 92 | 40 | 38 | 78 | 45 | 15 | 25 |
| 9 | Abdul Rahim Chowdhury | 20 | M | 97 | 36 | 50 | 86 | 90 | 15 | 23 |
| 10 | Devidas Pandit | 40 | M | 91 | 39 | 38 | 77 | 46 | 14 | 16 |
| 11 | Gurushanthavva Kirvalli | 13 | F | 78 | 18 | 68 | 86 | 92 | 17 | |
| 12 | Shanthavva Sadalgi | 18 | F | 80 | 16 | 17 | 33 | 20 | 15 | 11 |
| 13 | Kamal Loni | 18 | F | 88 | 23 | 55 | 78 | 73 | 15 | 34 |
| 14 | Gurubasappa Loni | 18 | M | 93 | 46 | 43 | 89 | 63 | 18 | 18 |
| 15 | Shivanappa Korachgeon | 18 | M | 88 | 38 | 36 | 74 | 38 | 18 | 11 |
| 16 | Sundrabhai Dankar | 21 | F | 90 | 40 | 38 | 78 | 37 | 13 | 18 |
| 17 | Laxmibhai Dankar | 22 | F | 65 | 30 | 48 | 78 | 48 | 16 | 14 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | |
| 18 | Abdul Borotte | 20 | M | 81 | 31 | 59 | 90 | 99 | 15 | 35 |
| 19 | Sidramayaswammy | 18 | M | 76 | 38 | 38 | 76 | 39 | 15 | 1 |
| 20 | Basavva Loni | 16 | M | 73 | 40 | 44 | 80 | 46 | 15 | 24 |
| 21 | Bhimavva Rajput | 31 | M | 79 | 30 | 47 | 77 | 59 | 13 | 14 |
| 22 | Gurumothiaswamy | 18 | M | 76 | 41 | 45 | 86 | 50 | 12 | 14 |
| 23 | Kamalavva Rajput | 14 | M | 79 | 21 | 54 | 75 | 89 | 12 | 16 |
| 24 | Magdum Nathar | 30 | M | 65 | 40 | 45 | 84 | 70 | 74 | 25 |
| 25 | Imambi Awoor | 36 | M | 76 | 36 | 42 | 78 | 35 | 13 | 13 |
| 26 | Irappassery | 24 | M | 74 | 27 | 37 | 64 | 56 | 15 | 14 |
| 27 | Nagappassery | 18 | M | 68 | 19 | 16 | 36 | 34 | 14 | 15 |
| 28 | Sangavva Eli | 14 | M | 74 | 27 | 56 | 86 | 41 | 13 | 21 |
| 29 | Sonobhai UalbuMgi | 25 | F | 73 | 32 | 43 | 75 | 37 | 15 | 14 |
| 30 | Ahmad Pattan | 16 | M | 52 | 21 | 19 | 40 | 20 | 15 | 7 |
| 31 | Mahatab Jamadhar | 17 | M | 60 | 27 | 29 | 65 | 27 | 15 | 10 |
| 32 | Sathavva Dankar | 36 | M | 52 | 20 | 36 | 56 | 37 | 12 | 15 |
| 33 | Manyavva Dankar | 31 | M | 69 | 50 | 35 | 85 | 40 | 12 | 15 |
| 34 | Bhimana Nimbal | 40 | M | 52 | 21 | 18 | 39 | 17 | 14 | 8 |
| 35 | Tulasambi Dasavale | 60 | M | 70 | 38 | 36 | 74 | 40 | 14 | 12 |
| 36 | Shivasarnappa Thipargi | 16 | M | 47 | 20 | 22 | 42 | 25 | 15 | 8 |
| 37 | Ratnabhai Sutar | 14 | F | 69 | 40 | 43 | 83 | 41 | 13 | 12 |
| 38 | Gangabhai Shetwale | 21 | F | 64 | 38 | 49 | 87 | 58 | 13 | 23 |
| 39 | Sidrappa Topagi | 26 | M | 64 | 46 | 38 | 85 | 51 | 17 | 13 |
| 40 | Manjur Lupde | 16 | M | 42 | 38 | 41 | 79 | 52 | 15 | 15 |
| 41 | Kasim Pattan | 28 | M | 51 | 17 | 19 | 36 | 24 | 14 | 8 |
| 42 | Jairabi Gadiwale | 40 | M | 55 | 40 | 36 | 76 | 34 | 15 | 11 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 43 | Nannibhu Sache | 50 | M | 48 | 25 | 31 | 56 | 37 | 13 | 13 |
| 44 | Saranavva Shilapure | 26 | M | 37 | 41 | 46 | 87 | 46 | 15 | 15 |
| 45 | Gurulingappa Gangane | 28 | M | 36 | 30 | 31 | 61 | 42 | 14 | 11 |
| 46 | Shalin Deshmukh | 20 | F | 34 | 24 | 29 | 53 | 39 | 28 | 11 |
| 47 | Saaswathy Pandit | 30 | F | 38 | 42 | 44 | 86 | 27 | 12 | 11 |
| | TOTAL | | | | | | 3416 | 1094 | | |

Name of Parishramalaya : Maindargo Distt. Sholapur

Date of starting 1-12-55
Number of Charkha sets : 37

| Serial No. | Name of operative | Class of Spinner | No. of days of trg. | From 10th March 56 to 26th March 56 | | | | | | From 28th March to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Card-ing | Spg.<br>Age | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Sri Ratnabai Rajppa . . . . . | Age<br>45 | 91 | 31 | 26½ | 57½ | 1 | 14 | 16 | 46·40 | 37·10 | 83·50 | 41 | 20 | 12 |
| 2 | Sri Ratnabai S. . . . . . . | 35 | 97 | 31 | 30·25 | 41·25 | 25 | 10 | 14 | 35·50 | 42·20 | 78·10 | 42 | 13 | 13 |
| 3 | Sri Corerevva . . . . . . | 45 | 97 | 32 | 27·10 | 59·10 | 4 | 14 | 16 | 30·10 | 54·10 | 84·20 | 60 | 15 | 18 |
| 4 | Sri Gorappa Kudlappa . . . | 30 | 62 | | | | | | | | | | | | |
| 5 | Sri Gangappa Siddhappa . . . | 60 | 97 | 34·40 | 46·10 | 80·50 | 28 | 10 | 12 | 39·10 | 40·20 | 29·30 | 32 | 12 | 12 |
| 6 | Sri Ambappa Siddhappa . . . | 30 | 96 | 33·30 | 49·25 | 73·55 | 57 | 14 | 25 | 32·50 | 49·30 | 82·20 | 64 | 16 | 20 |
| 7 | Sri Kallappa Bhirappa . . . | 30 | 95 | 30 | 49·25 | 79·25 | 59 | 20 | 16 | 37·50 | 41·05 | 79·55 | 60 | 14 | 22 |
| 8 | Sri Murgepa Sangappa . . . | 12 | 8 | | | | | | | | | | | | |
| 9 | Sri Murgeppa Sadakshari . . . | 21 | 63 | 30·05 | 30·40 | 60·45 | 28 | 13 | 12 | | | | | | |
| 10 | Sri Bhimappa Iraneppa . . . | 32 | 83 | 30 | 18·20 | 48·20 | 26 | 12 | 12 | | | | | | |
| 11 | Sri Abdulsha Bahadursha . . . | 25 | 86 | 41·20 | 39·30 | 80·50 | 38 | 11 | 11 | 38·23 | 40 | 78·23 | 52 | 16 | 16½ |
| 12 | Sri Dhurubhai Narsi . . . . | 24 | 25½ | | | | | | | | | | | | |
| 13 | Sri Ladkha Dadebhai . . . | 18 | 91½ | 30·10 | 21·20 | 51·30 | 18 | 16 | 11 | 40·20 | 38·30 | 78·50 | 45 | 15 | 14½ |
| 14 | Sri Abdulrheman C. . . . . | 20 | 96½ | 45·10 | 42·20 | 87·30 | 44 | 15 | 12½ | 36·45 | 50·30 | 87·15 | 90 | 15 | 23 |
| 15 | Sri Shivputra Chanabsappa . . . | 28 | 77 | 35·35 | 30·50 | 66·20 | 51 | 15 | 13½ | | | | | | |
| 16 | Sri Vithal Ramchandra . . . | 26 | 43 | | | | | | | | | | | | |
| 17 | Sri Devidas Adinath . . . . | 40 | 91 | 30·05 | 36·45 | 66·50 | 29 | 14 | 8 | 39·10 | 38·30 | 75·40 | 46 | 14 | 16 |
| 18 | Sri Saranappa Gurulingappa . . | 35 | 63½ | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Sri Gitabai Bapusha | 56 | 65 | 10·15 | 16·15 | 25·30 | 17 | 14 | | | | | | | |
| 20 | Sri Saranappa S. | 40 | 78 | 23·30 | 26·5 | 49·35 | 21 | 15 | 8 | | | | | | |
| 21 | Sri Ratnabai B. | 40 | 78½ | 30·30 | 30·30 | 62 | 25 | 12 | 14 | | | | | | |
| 22 | Sri Laxmibai | 45 | 81½ | 6·50 | 9·5 | 15·55 | 12 | 20 | 7½ | | | | | | |
| 23 | Sri Bapurao Hanmantrao | | 45 | 66½ | 35·30 | 18·30 | 54 | 13 | 10 | 9 | | | | | |
| 24 | Sri Gurushantappa R. | 13 | 76½ | 20·40 | 19·30 | 40·10 | 32 | 14 | 12 | 18·10 | 68·10 | 86·12 | 91 | 17 | 23 |
| 25 | Sri Shantappa Siddhappa | 18 | 77½ | 34·45 | 42·15 | 77·00 | 39 | 14 | 13 | 16 | 17·30 | 33·30 | 20 | 15 | 11 |
| 26 | Sri Kamalabai Shivlingappa | 18 | 80 | 30·40 | 20·40 | 51·20 | 46 | 13 | 16 | 23·15 | 55 | 78·15 | 73 | 15 | 34 |
| 27 | Sri Siddhappa S. | 20 | 87½ | | | | | | | | | | | | |
| 28 | Sri Gurubasappa C. | 18 | 92½ | 39·30 | 36·45 | 76·15 | 46 | 14 | 8 | 40·15 | 43 | 83·15 | 63 | 18 | 17½ |
| 29 | Sri Shivaneappa B. | 18 | 88 | 29·30 | 34 | 63·30 | 20 | 15 | 12½ | 38 | 36 | 74 | 38 | 18 | 10½ |
| 30 | Sri Danappa Rachappa | 17 | 8 | | | | | | | | | | | | |
| 31 | Sri Siromani Chothmal | 14 | 74 | 11·00 | 11·45 | 22·45 | 10 | 14 | 6·5 | | | | | | |
| 32 | Sri Sundrabai Prabhudhangar | 21 | 90 | 10·10 | 38·25 | 48·35 | 36 | 13 | 18 | 43·00 | 39·20 | 82·20 | 48 | 18 | 10 |
| 33 | Sri Nagappa F | 20 | 68½ | 31·15 | 33·56 | 65·11 | 31 | 15 | 9 | | | | | | |
| 34 | Sri Sidlingappa | 16 | 50 | | | | | | | | | | | | |
| 35 | Sri Ibrahim Adamkha | 40 | 67½ | 25·5 | 31·15 | 56·20 | 24 | 12 | 13½ | | | | | | |
| 36 | Sri Laximbai V. | 22 | 64½ | 28·20 | 24·30 | 52·50 | 31 | 14 | 12 | 30·20 | 48·42 | 79·02 | 48 | 15 | 14 |
| 37 | Sri M. Saybaki NIBAI | 32 | 60 | 6·10 | 17·00 | 23·10 | 4 | 14 | 1½ | | | | | | |
| 38 | Sri Abdulajim Mohamad | 40 | 80½ | 38·00 | 42·20 | 80·20 | 43 | 15 | 12½ | 31·45 | 59·45 | 100·10 | 11 | 15 | 35½ |
| 39 | Sri N. Gurunigappa | 18 | 61½ | 38·10 | 40·35 | 74·15 | 29 | 15 | 13½ | | | | | | |
| 40 | Sri Nabi Hasaratsingh | 18 | 38 | | | | | | | | | | | | |
| 41 | Sri Chidramaya Sanayya | 18 | 76 | 39·30 | 37·35 | 77·05 | 30 | 13 | 13 | 38·45 | 38·00 | 76·45 | 39 | 18 | 13½ |
| 42 | Sri Basappa Rachappa | 16 | 73 | 37·10 | 33·30 | 70·40 | 29 | 12 | 12½ | 40·00 | 44·15 | 84·15 | 46 | 15 | .. |
| 43 | Sri Kimayya D. | 31 | 79 | 16·00 | 20·30 | 36·30 | 56 | 12 | 24 | 30·30 | 47·40 | 78·10 | 50 | 13 | 24 |
| 44 | Sri Gurumoniappa M. Swami | 18 | 76½ | .. | .. | .. | .. | .. | .. | 41·10 | 45·35 | 86·45 | 50 | 12 | 13½ |
| 45 | Sri Kamrukha D. Rajput | 19 | 79 | 25·00 | 25·00 | 50·00 | 56 | 12 | 30 | 21·10 | 45·15 | 75·25 | 89 | 12 | 16 |
| 46 | Sri Gafurabdul | 30 | 62½ | .. | .. | .. | .. | .. | .. | 40·45 | 6·08 | 85·33 | 90 | 18 | 25 |
| 47 | Sri Saiymansingh B. | 28 | 58½ | 35·05 | 35·50 | 70·55 | 31 | 15 | 19½ | | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | Sri Shyamji | 36 | 76 | 38·00 | 34·40 | 86·40 | 19 | 16 | 12 | 36·35 | 40·50 | 77·25 | 35 | 15 | .. |
| 49 | Sri M. Hanif | 20 | 61 | 35·10 | 37·30 | 72·40 | 51 | 11 | 10½ | | | | | | |
| 50 | Sri Irappa Sarappa | 24 | 43½ | 32·30 | 48·35 | 82·05 | 66 | 15 | 22 | 21·00 | 37·00 | 58·00 | 56 | 15 | 24 |
| 51 | Sri Nagappa A. Seri | 18 | 67½ | 36·00 | 30·60 | 75·50 | 59 | 14 | 20½ | 19·00 | 16·10 | 35·10 | 34 | 14 | 15 |
| 52 | Sri Sangappa Saranappa | 14 | 73½ | 30·00 | 34·10 | 64·10 | 28 | 11 | 12 | 29·15 | 56·15 | 86·30 | 41 | 13 | 21 |
| 53 | Sri Sonubai | 25 | 72½ | 38·05 | 40·56 | 79·01 | 85 | 15 | 16 | 32·15 | 43·40 | 75·55 | 37 | 15 | 14 |
| 54 | Sri Irappa Telappa | 27 | 41 | | | | | | | | | | | | |
| 55 | Sri Ahmad Ibrahim Pathan | 16 | 62 | 33·15 | 38·35 | 71·50 | 38 | 14 | 13 | 21·00 | 11·45 | 32·45 | 20 | 15 | 6½ |
| 56 | Sri Mahetab Mohamad | 17 | 59½ | 27·15 | 45·15 | 72·30 | 39 | 15 | 13 | 27·30 | 4·10 | 31·40 | 27 | 15 | 10 |
| 57 | Sri Sanappa Keehappa | 36 | 52 | 42·35 | 38·50 | 81·25 | 37 | 12 | 12 | 26·10 | 36·10 | 62·20 | 37 | 12 | 15 |
| 58 | Sri Maneappa Karesppa | 31 | 68½ | 38·20 | 00·1 | 38·21 | 41 | 14 | 16 | 11·50 | 35·36 | 47·26 | 40 | 10 | 15 |
| 59 | Sri Gangappa Siddhappa | 50 | 37½ | 42·35 | 34·30 | 76·05 | 27 | 12 | 12 | | | | | | |
| 60 | Sri Bhimappa Issappa | 40 | 51½ | 38·20 | 37·30 | 75·50 | 15 | 11 | 12 | 21·00 | 19·39 | 39·30 | 17 | 14 | 7½ |
| 61 | Sri Kulsangi Nabiso | 60 | 70 | 56·00 | 42·30 | 98·30 | 20 | 10 | 16 | 38·30 | 30·40 | 69·10 | 40 | 14 | 12 |
| 62 | Sri Shivsaranappa G. | 16 | 47 | 14·15 | 44·15 | 58·30 | 14 | 15 | 12½ | 20·10 | 22·00 | 42·10 | 25 | 15 | 13 |
| 63 | Sri P. Shivappa | 16 | 68 | 34·40 | 49·20 | 84·00 | 25 | 14 | 9 | 40·45 | 43·00 | 83·45 | 41 | 13 | 12 |
| 64 | Sri Gangubai Bapurao | 21 | 64 | 38·45 | 40·50 | 79·35 | 42 | 14 | 9 | 38·55 | 49·50 | 87·45 | 58 | 13 | 23 |
| 65 | Sri Siddhappa Kalyanappa | 26 | 64 | 30·00 | 29·50 | 59·50 | 30 | 14 | 14 | 46·30 | 37·40 | 84·10 | 51 | 17 | 13 |
| 66 | Sri Ranabai Irappa | 14 | 68 | 34·40 | 49·20 | 84·00 | 25 | 14 | 9 | 40·45 | 43·00 | 83·45 | 41 | 12 | 12 |
| 67 | Sri Tarabai Gulab | 24 | 10 | | | | | | | | | | | | |
| 68 | Sri Manjur Babalal | 16 | 42 | 38·10 | 40·35 | 78·45 | 29 | 15 | 13½ | 39·30 | 41·30 | 81 | 52 | 15 | 14½ |
| 69 | Sri Mohamadsha Malacksha | 18 | 22½ | | | | | | | | | | | | |
| 70 | Sri Kasim Ibrahim | 28 | 50½ | 33·05 | 47·54 | 80·50 | 48 | 15 | 22 | 17 | 19·30 | 36·30 | 24 | 14 | 3½ |
| 71 | Sri Nasavanppa Rachappa | 28 | 21 | | | | | | | | | | | | |
| 72 | Sri Irana Bhimsen | 16 | 30 | 16·10 | 17 | 33·10 | 16 | 12 | 7½ | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73 | Sri Dharamana Siddhappa . . . . | 32 | 35½ | 14·15 | 10 | 24·15 | 6 | 11 | 2½ | | | | | | |
| 74 | Sri Mubarak M. . . . . . | 20 | 27 | | | | | | | | | | | | |
| 75 | Sri Bassappa Saranappa . . . | 16 | 22 | | | | | | | | | | | | |
| 76 | Sri Jayravikarim . . . . | 40 | 54½ | 26·55 | 26·10 | 53·05 | 17 | 10 | 10 | 40·40 | 36·35 | 77·15 | 34 | 15 | 11 |
| 77 | Sri Nanhiv Chandso . . . . | 50 | 48 | 26·30 | 40·25 | 66·55 | 25½ | 14 | 25 | 31·35 | 48·20 | 79·55 | 37 | 13 | 13 |
| 78 | Sri Saranappa Irrappa . . . | 26 | | 46·50 | 40·10 | 86·15 | 35 | 13 | 14½ | 41·25 | 46·10 | 87·35 | 46 | 15 | 15 |
| 79 | Sri Charitranath S. . . . . | 24 | 17½ | 17·15 | 17·10 | 34·25 | 9 | 14 | 6 | | | | | | |
| 80 | Sri Gurulingappa S. . . . . | 28 | 36 | 37·30 | 42·30 | 80 | 40 | 13 | 14 | 30·30 | 31·15 | 61·45 | 42 | 14 | 11 |
| 81 | Sri Shalinibai Keshav . . . | 20 | 36 | 27 | 48 | 75 | 25 | 15 | 12 | 24·32 | 21·50 | 46·22 | 39 | 27 | 11 |
| 82 | Sri Saraswatibai Adinath . . . | 30 | 35 | 44 | 36 | 80 | 22 | 13 | 10 | 42·25 | 40·15 | 82·40 | 27 | 12 | 13 |
| | TOTAL . . . . | | | | | | | | | | | 3581 | 2198 | | |

Name of Parishramalaya: Parola (East Khandesh) (Maharashtra)

Date of starting 7-2-56
No. of Charkha sets : 30

| S. No. | Name of operative | Class of spinner |  | No. of days trg. of | From 10-3-56 to 27-3-56 |  |  |  |  |  | From 28-3-56 to 13-4-56 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Duration of work (hours) |  |  |  |  |  | Duration of work (hours) |  |  |  |  |  |
|  |  |  |  |  | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Coun | Loss Tolas |
| 1 | 2 | 3 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age | Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Blachandra Yade | 20 | M | 62 | 46 | 52 | 98 | 86 | 13 | 50 | 56 | 56 | 112 | 86 | 14 | 50 |
| 2 | Shantilal Jain | 20 | M | 60 | 46 | 48 | 94 | 60 | 14 | 30 | 50¼ | 51½ | 101¾ | 103¾ | 14 | 60 |
| 3 | Narayan Jade | 19 | M | 62. | 28 | 60 | 88 | 66 | 12 | 30 | 50¾ | 55¾ | 106½ | 115¾ | 13 | 64 |
| 4 | Abdulkarim | 18 | M | 52 | 35½ | 70 | 105½ | 107 | 15 | 25 | 9½ | 20½ | 30 | 58 | 16 | 7½ |
| 5 | Rasiklal | 20 | M | 62 | 54¼ | 56½ | 110¾ | 55 | 12 | 30 | 56 | 55 | 111 | 60½ | 12 | 40 |
| 6 | Bhatu Vani | 28 | M | 62 | 40¼ | 60½ | 100¾ | 82 | 13 | 50 | 39 | 25½ | 64½ | 23 | 13 | 19 |
| 7 | Vishwanath Gande | 34 | M | 60½ | 49 | 57 | 106 | 29 | 12 | 75 | 56 | 56 | 112 | 34½ | 13 | 17½ |
| 8 | Shri Ram Patil | 21 | M | 62 | 46¼ | 58½ | 108¾ | 78 | 13 | 40 | 50½ | 51¾ | 102¼ | 102¾ | 14 | 57½ |
| 9 | Atmaram Patil | 35 | M | 62 | 60 | 60 | 120 | 50 | 14 | 30 | 64 | 64 | 128 | 24 | 12 | 20 |
| 10 | Jagannath Patil | 21 | M | 52 | 52¼ | 54¾ | 107 | 83 | 15 | 35 | 48 | 48 | 96 | 82½ | 14 | 37½ |
| 11 | Himatrao Patil | 20 | M | 62 | 56 | 52 | 108 | 80 | 13 | 40 | 55 | 56 | 111 | 103½ | 14 | 50 |
| 12 | Vasant Patil | 20 | M | 62 | 41½ | 56¾ | 98¼ | 64 | 13 | 30 | 52 | 60 | 102 | 82½ | 12 | 41 |
| 13 | Dayaram Patil | 55 | M | 61 | 48½ | 43 | 91½ | 25½ | 12 | 70 | 56 | 48 | 104 | 22½ | 14 | 10 |
| 14 | Kamaruddin | 24 | M | 51 | 53½ | 58½ | 112 | 119 | 14 | 40 | 11 | 12 | 23 | 28 | 16 | 7½ |
| 15 | Nathuvani | 25 | M | 56 | 32½ | 64 | 96½ | 112 | 16 | 30 | 26 | 36½ | 62½ | 68 | 15 | 16 |
| 16 | Shamarakha | 21 | M | 62 | 46 | 45 | 91 | 39 | 12 | 30 | 56 | 56 | 112 | 61 | 13 | 54 |
| 17 | Dibanghar Mehadara |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Bhila Patil | 32 | M | 62 | 43½ | 45½ | 89 | 62 | 14 | 20 | 41 | 54½ | 95½ | 53½ | 14 | 17½ |
| 19 | Manohar Gurav | 24 | M | 62 | 31½ | 62½ | 94 | 97 | 18 | 40 | 42 | 56 | 98 | 92½ | 16 | 32½ |
| 20 | Chithu Chaudhary | 23 | M | 61 | 23 | 86 | 109 | 100 | 12 | 70 | 46 | 66 | 112 | 98 | 13 | 50 |
| 21 | Mohan Masad | 20 | M | 47 | 36½ | 49 | 85½ | 36 | 10 | 15 | 36½ | 49 | 86½ | 32½ | 12 | 20 |
| 22 | Abdul Aziz | 19 | M | 61 | 53½ | 52½ | 105½ | 77 | 14 | 40 | 50 | 50½ | 100½ | 103 | 15 | 60 |
| 23 | S. Hassan. | 18 | M | 60 | 46 | 41 | 87 | 55 | 16 | 30 | 43½ | 60½ | 104 | 140 | 14 | 55 |
| 24 | Kantilal | 18 | M | 59 | 26 | 48½ | 74½ | 69 | 14 | 30 | 24 | 54 | 78 | 103½ | 16 | 67 |
| 25 | Bhimrao Deshmukh | 33 | M | 60 | 60 | 60 | 120 | 64 | 14 | 40 | 56 | 56 | 112 | 135 | 16 | 64 |
| 26 | Suman Shere | 29 | M | 61 | 41 | 57 | 98 | 79 | 14 | 20 | 42 | 70 | 112 | 105 | 14 | 40 |
| 27 | Namdev Sathe | 18 | M | 55 | 59 | 60 | 119 | 105 | 15 | 40 | 29 | 27 | 56 | 65½ | 14 | 24 |
| 28 | Gunvant Patil | 19 | M | 57 | 44 | 54 | 98 | 72 | 15 | 30 | 56 | 56 | 112 | 121 | 14 | 42½ |
| 29 | Vishvas Patil | 29 | M | 57 | 55½ | 54 | 109 | 50 | 13 | 30 | 64 | 55 | 119 | 53 | 12 | 39 |
| 30 | Tukaram Deshmukh | 18 | M | 56 | 47 | 68 | 115 | 63 | 13 | 40 | 56 | 56 | 110 | 66½ | 14 | 50 |
| 31 | Bhalerao Patil | 24 | M | 19 | | | | | | | | | | | | |
| 32 | Chagan Gadhari | 22 | M | 47 | 40½ | 41 | 81½ | 91½ | 14 | 40 | 54½ | 54½ | 109½ | 107½ | 15 | 50 |
| | TOTAL | | | | | | | | | | | 2,894 | 2,332 | | | |

Name of Parishramalaya : **Patankar, Sarvodaya Sanchalak Rajur.**

No. of Charkha Sets : 30

| Serial No. | Name of operative | Class of Spinner | | No. of days of Training | From the 10th March 1956 to 27th March 1956 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Murlidhar Tukaram Shevlo . | 19 | M | 67 | 40 | 40 | 80 | 51½ | 40 | 40 | 48 | 48 | 96 | 81½ | 18 | 3¾ |
| 2 | Anandial Jivraj Doshi . . . | 22 | M | 63 | 56 | 55 | 111 | 86 | 16 | 43¾ | 44 | 44 | 88 | 75½ | 16 | 3¾ |
| 3 | Basant Ramchandra Kharade . | 22 | M | 57½ | 44 | 48 | 92 | 47¼ | 15 | 45 | 24 | 24 | 48 | 39½ | 15 | .. |
| 4 | Shanker Jagannath Dharane . . | 22 | M | 58 | 52 | 48 | 100 | 47½ | 16 | 75 | 56 | 52 | 108 | 48 | 16 | 8¾ |
| 5 | Shantilal R. Dagdu . . . . | 18 | M | 56 | 48 | 55½ | 103½ | 57¾ | 16 | 36¼ | 12 | 16 | 28 | 16 | 16 | 33¾ |
| 6 | Digamber T. Sinde . . . . | 26 | M | 63 | 52 | 51 | 103 | 52 | 16 | 96¼ | 40 | 44 | 84 | 62 | 17 | 11¼ |
| 7 | Kumudini G. Durve . . | 21 | F | 60½ | 45 | 51 | 96 | 58½ | 18 | 76¼ | 56 | 56 | 112 | 76¾ | 19 | 10 |
| 8 | Pratima Korame . . . . | 28 | F | 63 | 48 | 59 | 107 | 57¼ | 16 | 47½ | 48 | 52 | 100 | 62½ | 18 | 17½ |
| 9 | Anand A. Kulkarni . . . . | 27 | M | 62½ | 56 | 56 | 112 | 43¾ | 16 | 12½ | 56 | 56 | 112 | 69½ | 19 | 2½ |
| 10 | Shankar L. Shebde . . . | 20 | M | 48½ | 44 | 44 | 88 | 33¾ | 15 | 52½ | .. | .. | .. | .. | .. | .. |
| 11 | Kalavati Kakade . . . | 22 | F | 36 | 54 | 50 | 104 | 20½ | 12 | 95 | 56 | 56 | 112 | 36 | 16 | 2½ |
| 12 | Puna G. Kavte . . . . | 23 | M | 30 | 52 | 52 | 104 | 28½ | 14 | 33¾ | 52 | 52 | 104 | 41½ | 16 | 3¾ |
| 13 | Kamalatai Chitrigi . . . | 45 | F | 36 | 48 | 40 | 88 | 27½ | 16 | 38¾ | 36 | 40 | 76 | 28¾ | 18 | 5 |
| 14 | Hari D. Rokde . . . | 16 | M | 42½ | 53 | 57 | 110 | 30¾ | 15 | 42½ | 33 | 48 | 96 | 28 | 16 | 37½ |
| 15 | Malti T. Bhangre . . . | 17 | F | 47½ | 53 | 50 | 103 | 35¾ | 14 | 22½ | 52 | 52 | 104 | 32 | 16 | 21¼ |
| 16 | Aba K. Pondgaokar . . . | 28 | F | 34½ | 56 | 54 | 110 | 22 | 14 | 22½ | 28 | 32 | 60 | 15 | 15 | 2½ |
| 17 | Laxman Nagji Bande . . . | 27 | F | 36 | 52 | 52 | 104 | 35½ | 16 | 5 | 44 | 48 | 92 | 46 | 16 | 3¾ |
| 18 | Sau. Shramila Kulkarni . . | 24 | F | 60½ | 56 | 54 | 110 | 34¾ | 16 | 17¾ | 48 | 52 | 100 | 38¼ | 18 | 2½ |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Shravna T. Dadvade | 19 | M | 56½ | 52 | 55 | 107 | 29 | 15 | 13¾ | 44 | 52 | 96 | 32¼ | 17 | 2½ |
| 20 | Shavderam H. Rangta | 20 | M | 47½ | 52 | 57 | 109 | 20¾ | 14 | 23¾ | 44 | 48 | 92 | 37 | 22 | 22½ |
| 21 | Badu Shalka Pawar | 20 | M | 46 | 57 | 52 | 109 | 39¼ | 16 | 8¾ | 40 | 44 | 84 | 47 | 19 | 8¾ |
| 22 | Soma Dagdu Bote | 20 | M | 49½ | 52 | 57 | 109 | 35½ | 14 | 1¼ | 44 | 56 | 100 | 40¾ | 20 | 3¾ |
| 23 | Nivruti Tukaram Deshmukh | 18 | F | 51½ | 56 | 56 | 112 | 32½ | 15 | 36¼ | 52 | 56 | 108 | 40½ | 18 | 8¾ |
| 24 | Trambak Santha Botkar | 19 | M | 50 | 57 | 47 | 104 | 25 | 12 | 25 | 48 | 48 | 96 | 24¾ | 16 | 1¼ |
| 25 | Hari Mahadev Bhangre | 20 | M | 48 | 44 | 48 | 92 | 24 | 14 | 27½ | 36 | 44 | 80 | 23½ | 16 | 1¼ |
| 26 | Dula Gopal Bangre | 18 | M | 48 | 52 | 49 | 101 | 24 | 15 | 2½ | 40 | 40 | 80 | 16½ | 15 | 2½ |
| 27 | Soma Hari Konda | 17 | M | 57 | 52 | 52 | 104 | 21½ | 14 | 6¼ | 52 | 56 | 108 | 22¾ | 18 | 2½ |
| 28 | Nima Lika Konda | 14 | M | 51½ | 54 | 49 | 103 | 17¼ | 13 | 17½ | 48 | 52 | 100 | 19½ | 19 | 17½ |
| 29 | Soma Maruti Jadhav | 21 | M | 46 | 48 | 48 | 96 | 26½ | 16 | 17½ | 28 | 32 | 60 | 20¾ | 16 | 5 |
| 30 | Balu Dagdu Bamle | 24 | M | 49 | 40 | 44 | 84 | 22½ | 15 | 17½ | 44 | 48 | 92 | 32½ | 16 | 2½ |
| 31 | Samju Nagji Kondal | 28 | M | 51½ | 52 | 51 | 103 | 35 | 15 | 3¾ | 48 | 52 | 100 | 42¼ | 18 | 7½ |
| 32 | Sau Vilochna Khadadkar | 22 | F | 48 | 56 | 56 | 112 | 39¼ | 15 | 13¾ | 52 | 52 | 104 | 41½ | 18 | 1¼ |
| 33 | Sindu Savderam Nadekar | 20 | M | 49½ | 52 | 52 | 104 | 30½ | 15 | 2½ | 48 | 52 | 100 | 34½ | 17 | ¼ |
| 34 | Laxman Uka Tapase | 29 | M | 47½ | 48 | 47 | 95 | 21½ | 15 | 7½ | 16 | 20 | 36 | 7 | 16 | .. |
| 35 | Anna Gunaji Kondar | 30 | M | 44½ | 32 | 36 | 68 | 18¾ | 14 | 18¾ | 28 | 36 | 64 | 21 | 14 | 5 |
| 36 | Ramnath S. Ankale | 21 | M | 49½ | 52 | 52 | 104 | 35¾ | 15 | 20 | 48 | 48 | 96 | 42 | 18 | 1¼ |
| 37 | Shravana L. Konde | 20 | M | 49½ | 52 | 57 | 109 | 26¾ | 15 | 30 | 44 | 44 | 88 | 40½ | 22 | 17½ |
| 38 | Eknath Dagdu Bhalerao | 20 | M | 28½ | 32 | 32 | 64 | 15½ | 13 | 62½ | .. | .. | .. | .. | .. | .. |
| 39 | Laxman Fusa Rokde | 21 | M | 17½ | 57 | 52 | 109 | 42 | 16 | 25 | 48 | 48 | 96 | 54½ | 18 | 6¼ |
| 40 | Vishnu Sadhu Rokde | 24 | M | 45½ | 51 | 52 | 103 | 47 | 18 | 7½ | 28 | 32 | 60 | 38 | 20 | 25 |
| 41 | Dhawla D. Kande | 20 | M | 47½ | 52 | 46 | 98 | 17 | 16 | 42½ | 52 | 50 | 108 | 27 | 16 | 7½ |
| 42 | Dagadu M. Kande | 26 | M | 45 | 52 | 51 | 103 | 19 | 14 | 3¾ | 36 | 40 | 76 | 32 | 16 | 1½ |
| 43 | Vithal S. Sukate | 24 | M | 42½ | 44 | 48 | 92 | 24¼ | 14 | 20 | 40 | 48 | 88 | 39½ | 18 | 15 |
| 44 | Namdev A. Rokade | 15 | M | 34½ | 49 | 53 | 102 | 18½ | 14 | 11½ | 16 | 24 | 40 | 12 | 16 | 5 |
| 45 | Suresh Maruti Gamande | 22 | M | 23 | 34 | 34 | 68 | 19 | 12 | 26¼ | 52 | 48 | 100 | 33 | 15 | 2½ |
| | TOTAL | | | | | | | | | | | | 3772 | 1620 | | |

No. of Charkha sets ; 38

Name : Khadi Samiti—Jaipur

Date of starting : 10-1-56

| Serial No. | Name of operative | Class of operative | | Training days | From 10th March 1956 to 27th March 1956 | | | | | | From 28th March 1956 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Count of yarn spun | Production in hanks | Loss Tolas | Carding | Spg. | Total | Count of yarn spun | Production in hanks | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Kamla Devi . . . . . | 30 | F | 76 | 27 | 57 | 84 | 17 | 72 | 22 | 20 | 35 | 55 | 17 | 53 | 13 |
| 2 | Geeta Devi . . . . . | 14 | F | 70 | 36 | 40 | 76 | 16 | 48 | 41 | 41 | 42 | 83 | 16 | 60 | 15 |
| 3 | Govinde Devi . . . . . | 28 | F | 82 | 35 | 50 | 85 | 15 | 63 | 20 | 44 | 57 | 101 | 17 | 86 | 21 |
| 4 | Ganga Devi . . . . . | 32 | F | 75 | 28 | 42 | 70 | 15 | 40 | 13 | 30 | 49 | 79 | 16 | 56 | 15 |
| 5 | Nathi Devi . . . . . | 27 | F | 74 | 34 | 53 | 87 | 16 | 59 | 15 | 47 | 59 | 16 | 17 | 74 | 22 |
| 6 | Mangash Devi . . . . . | 21 | F | 75 | 30 | 28 | 58 | 16 | 31 | 10 | 25 | 33 | 58 | 18 | 45 | 13 |
| 7 | Murani Devi . . . . . | 25 | F | 76 | 28 | 36 | 64 | 16 | 36 | 13 | 30 | 30 | 60 | 16 | 41 | 12 |
| 8 | Sujan Devi . . . . . | 32 | F | 77 | 40 | 46 | 86 | 16 | 46 | 12 | 37 | 51 | 83 | 16 | 68 | 18 |
| 9 | Shanti Devi . . . . . | 23 | F | 81 | 36 | 56 | 92 | 16 | 69 | 20 | 40 | 63 | 103 | 15 | 94 | 24 |
| 10 | Urmila Devi . . . . | 18 | F | 80 | 26 | 31 | 57 | 17 | 35 | 11 | 30 | 35 | 65 | 16 | 46 | 10 |
| 11 | Jugal Bihari . . . . . | 19 | M | 78 | 25 | 50 | 75 | 17 | 53 | 14 | 28 | 36 | 64 | 16 | 53 | 14 |
| 12 | Bharat Prasad . . . . . | 19 | M | 74 | 47 | 54 | 101 | 15 | 79 | 18 | 44 | 58 | 102 | 16 | 88 | 22 |
| 13 | Sat Dev . . . . . | 20 | M | 78 | 44 | 54 | 98 | 17 | 78 | 19 | 46 | 61 | 107 | 16 | 88 | 22 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | Shimayal Goswami | 19 | M | 78 | 46 | 55 | 101 | 17 | 78 | 19 | 44 | 64 | 108 | 16 | 82 | 19 |
| 15 | Udasinh | 18 | M | 79 | 30 | 43 | 73 | 17 | 50 | 18 | 41 | 49 | 90 | 16 | 66 | 16 |
| 16 | Bhawan Sinh | 17 | M | 68 | 45 | 54 | 99 | 16 | 76 | 20 | 48 | 56 | 104 | 17 | 78 | 20 |
| 17 | Gagn Lal | 27 | M | 73 | 46 | 46 | 92 | 16 | 52 | 15 | 55 | 60 | 115 | 16 | 120 | 30 |
| 18 | Tek Chand | 23 | M | 70 | 41 | 44 | 85 | 16 | 46 | 13 | 20 | 38 | 58 | 16 | 42 | 14 |
| 19 | Sitaram | 22 | M | 69 | 37 | 43 | 80 | 16 | 64 | 17 | 31 | 53 | 84 | 17 | 97 | 25 |
| 20 | Lala 1 | 22 | M | 76 | 41 | 51 | 99 | 16 | 69 | 16 | 47 | 54 | 101 | 16 | 91 | 25 |
| 21 | Nahulal | 21 | M | 74 | 42 | 50 | 92 | 15 | 69 | 15 | 62 | 69 | 16 | 16 | 76 | 26 |
| 22 | Satyendra Gupta | 18 | M | 70 | 32 | 49 | 81 | 16 | 66 | 16 | 42 | 39 | 81 | 16 | 60 | 17 |
| 23 | Din Lal Sharma | 18 | M | 68 | 29 | 74 | 103 | 167 | 104 | 25 | 46 | 62 | 108 | 16 | 80 | 22 |
| 24 | Jashyap Datta Mishra | 25 | M | 70 | 38 | 48 | 86 | 17 | 66 | 19 | 46 | 48 | 94 | 16 | 66 | 16 |
| 25 | Vraga Devi | 35 | F | 71 | 28 | 60 | 88 | 16 | 72 | 24 | 46 | 61 | 107 | 17 | 60 | 17 |
| 26 | Pushpa Devi | 28 | F | 64 | 36 | 51 | 97 | 17 | 74 | 24 | 66 | 66 | 132 | 16 | 147 | 37 |
| 27 | Balkrishna Sharma | 21 | M | 76 | 37 | 67 | 104 | 17 | 79 | 20 | 66 | 64 | 130 | 16 | 105 | 26 |
| 28 | Arjua Veer Sharma | 20 | M | 69 | 38 | 52 | 90 | 16 | 64 | 16 | 34 | 60 | 94 | 16 | 68 | 17 |
| 29 | Shivnarain | 18 | M | 70 | 26 | 36 | 62 | 16 | 33 | 8½ | 37 | 33 | 70 | 16 | 42 | 15 |
| 30 | Tijan Devi | 21 | F | 70 | 36 | 69 | 105 | 16 | 86 | 22 | 37 | 54 | 91 | 17 | 91 | 23 |
| 31 | Bhuridevi Mali | 26 | F | 71 | 34 | 81 | 115 | 16 | 80 | 27 | 42 | 72 | 114 | 16 | 71 | 17 |
| 32 | Bainfuli Devi | 27 | F | 71 | 43 | 57 | 100 | 16 | 56 | 14 | 42 | 67 | 109 | 116 | 107 | 26 |
| 33 | Neeteedevi | 28 | F | 64 | 39 | 66 | 105 | 16 | 63 | 15 | 62 | 68 | 130 | 16 | 97 | 25 |
| 34 | Dhapan Devi | 39 | F | 70 | 32 | 66 | 98 | 16 | 78 | 18 | 59 | 54 | 123 | 14 | 164 | 41 |
| 35 | Bidani Devi | 26 | F | 63 | 38 | 64 | 102 | 16 | 74 | 18 | 48 | 48 | 127 | 16 | 96 | 24 |
| 36 | Viradi Devi | 19 | F | 70 | 38 | 50 | 88 | 17 | 57 | 16 | 60 | 75 | 135 | 16 | 82 | 20 |
| 37 | Uma Devi | 30 | F | 66 | 39 | 51 | 90 | 18 | 80 | 21 | 56 | 70 | 126 | 16 | 100 | 20 |
| 38 | Leela Devi | 26 | F | 66 | 39 | 53 | 92 | 18 | 77 | 28 | 56 | 70 | 126 | 17 | 122 | 31 |
| 39 | Sunder Devi | 21 | F | 66 | 36 | 50 | 86 | 18 | 52 | 14 | 67 | 59 | 126 | 16 | 113 | 29 |
| 40 | Sarayu Devi | 31 | F | 63 | 37 | 54 | 91 | 18 | 67 | 20 | 50 | 77 | 127 | 15 | 147 | 39 |
| 41 | Bina Devi | 30 | F | 63 | 37 | 56 | 93 | 16 | 97 | 25 | 49 | 93 | 142 | 15 | 155 | 39 |
| 42 | Bhuri Devi | 27 | F | 63 | 39 | 54 | 93 | 16 | 72 | 18 | 51 | 69 | 120 | 15 | 114 | 26 |
| 43 | Bidami Devi | 28 | F | 61 | 39 | 54 | 93 | 15 | 65 | 16 | 47 | 96 | 143 | 15 | 116 | 29 |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | | | | | | | |
| 44 | Gushti Devi | 31 | F | 62 | 33 | 57 | 89 | 16 | 63 | 16 | 59 | 56 | 115 | 17 | 63 | 15 |
| 45 | Seni Devi | 25 | F | 62 | 44 | 45 | 89 | 16 | 50 | 16 | 96 | 72 | 168 | 18 | 70 | 18 |
| 46 | Bidami Devi | 23 | F | 62 | 43 | 52 | 95 | 16 | 61 | 15 | 31 | 26 | 57 | 17 | 30 | 11 |
| 47 | Bhuri Devi | 27 | F | 63 | 39 | 52 | 91 | 17 | 54 | 16 | 55 | 72 | 127 | 18 | 78 | 90 |
| 48 | Gushti Devi | 23 | F | 60 | 28 | 43 | 71 | 15 | 53 | 14 | 52 | 58 | 110 | 18 | 93 | 24 |
| 49 | Saraju Devi | 30 | F | 63 | 36 | 50 | 76 | 16 | 60 | 15 | 71 | 39 | 110 | 18 | 65 | 16 |
| 50 | Tija Devi | 22 | F | 64 | 39 | 53 | 92 | 16 | 69 | 17 | 45 | 75 | 120 | 16 | 92 | 24 |
| 51 | Munjula Devi | 23 | F | 64 | 39 | 57 | 96 | 16 | 60 | 16 | 68 | 76 | 134 | 17 | 6 | 20 |
| 52 | Mana Devi | 30 | F | 63 | 38 | 56 | 94 | 16 | 60 | 15 | 57 | 61 | 118 | 16 | 62 | 61 |
| 53 | Vstulala | 26 | M | 60 | 32 | 58 | 80 | 17 | 50 | 13 | 35 | 42 | 77 | 15 | 50 | 14 |
| 54 | Shambhulal Sharma | 24 | M | 60 | 33 | 42 | 75 | 16 | 48 | 12 | 24 | 40 | 64 | 15 | 53 | 14 |
| 55 | Srinivas Sharma | 18 | M | 66 | 32 | 32 | 64 | 17 | 32 | 9 | 22 | 42 | 60 | 16 | 52 | 15 |
| 56 | Neghshayam Gupta | 23 | M | 83 | 42 | 59 | 101 | 18 | 98 | 25 | 35 | 65 | 100 | 16 | 109 | 26 |
| 57 | Deedatt Sharma | 20 | M | 55 | 40 | 50 | 90 | 16 | 66 | 20 | 48 | 75 | 123 | 16 | 150 | 39 |
| 58 | Jagdish P. Sharma | 28 | M | 56 | 43 | 58 | 101 | 17 | 75 | 149 | 47 | 72 | 119 | 15 | 161 | 40 |
| 59 | Laharichand Sharma | 29 | M | 55 | 33 | 57 | 90 | 17 | 75 | 18 | 45 | 54 | 99 | 16 | 67 | 16 |
| 60 | Natulal Parkh | 20 | M | 56 | 40 | 42 | 82 | 16 | 58 | 15 | 44 | 37 | 37 | 81 | 55 | 15 |
| 61 | Shantadevi | 22 | F | 60 | 24 | 30 | 54 | 16 | 25 | 8 | 40 | 45 | 85 | 15 | 61 | 15 |
| 62 | Shralgar Devi | 29 | F | 45 | 44 | 38 | 82 | 17 | 49 | 13 | 21 | 58 | 59 | 16 | 35 | 12 |
| 63 | Kemsi Lal | 26 | M | 55 | 32 | 52 | 84 | 17 | 53 | 14 | 45 | 51 | 96 | 16 | 70 | 23 |
| 64 | Lal Vishare | 28 | M | 55 | 24 | 19 | 43 | 17 | 20 | 8 | 19 | 20 | 39 | 16 | 24 | 8 |
| 65 | Kumud Kumari Sharma | 14 | F | 60 | 24 | 28 | 52 | 16 | 31 | 11 | 23 | 25 | 48 | 16 | 35 | 11 |
| 66 | Kusum Kumari Sharma | 25 | F | 60 | 30 | 40 | 70 | 16 | 35 | 11 | 25 | 30 | 55 | 18 | 57 | 19 |
| | TOTAL | | | | | | | | | | | | 5322 | 1387 | | |

Name of Parishramalaya: Bansa Distt. Jaipur

Date of starting: 10-1-56
Number of Charkha sets: 38

| S. No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March, 56 | | | | | | From 18th March 56 to 13 April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Card-ing | Spg. | Total | Prod. hanks | Count | Loss Tolas | Card-ing | Spg. | Total | Prod. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | Smt. Sundaridevi Swamy | 35 | F | 67 | 52½ | 54½ | 114 | 83 | 15 | .. | 35 | 56½ | 111⅓ | 117 | 17 | .. |
| 2 | Smt. Mothsunga | 25 | F | 65 | 53½ | 59½ | 11½ | 72 | 18 | .. | 35 | 66½ | 101½ | 96 | 16 | .. |
| 3 | Smt. Phapan Hiberi | 25 | F | 63 | 53 | 56½ | 109½ | 75 | 17 | .. | 69½ | 42½ | 112 | 95 | 17 | .. |
| 4 | Smt. Nanaki Bunkar | 30 | F | 64 | 55 | 55½ | 110½ | 66½ | 15 | .. | 72½ | 55½ | 128 | 50 | 15 | .. |
| 5 | Smt. Dhapan Bunkar | 30 | F | 59 | 45½ | 52½ | 98 | 54½ | 16 | .. | 59 | 45½ | 64½ | 35 | 16 | .. |
| 6 | Smt. Ganga Nayak | 35 | F | 68 | 52½ | 85 | 97½ | 57 | 16 | .. | 7½ | 49½ | 123½ | 58 | 15 | .. |
| 7 | Smt. Muri Gaisaza | 35 | F | 68 | 51 | 57 | 108 | 45½ | 16 | .. | 75 | 35 | 110 | 53 | 16 | .. |
| 8 | Smt. Narayani Purohit | 36 | F | 63 | 45 | 53½ | 110½ | 54 | 16 | .. | 55½ | 51½ | 107 | 75 | 16 | .. |
| 9 | Smt. Ramdharibunkar | 24 | F | 62 | 40½ | 63½ | 104 | 90 | 17 | .. | 57½ | 34½ | 72 | 45 | 17 | .. |
| 10 | Smt. Muridevi Swamy | 19 | F | 60 | 46 | 53½ | 99½ | 60 | 16 | .. | 65 | 42½ | 107½ | 65 | 16 | .. |
| 11 | Smt. Phulidevi Gaisaza | 32 | F | 64 | 64½ | 35 | 99½ | 37 | 16 | .. | 73 | 37 | 110 | 53 | 16 | .. |
| 12 | Smt. Prabhathi Kathij | 30 | F | 70 | 49 | 58 | 107 | 78½ | 16 | .. | 73½ | 49 | 122½ | 77½ | 15 | .. |
| 13 | Smt. Manaphul Brahman | 30 | F | 40 | 36½ | 21 | 57½ | 34 | 17 | .. | .. | .. | .. | .. | .. | .. |
| 14 | Smt. Ajani Bunkar | 23 | F | 57 | 55½ | 32½ | 88 | 16 | 31 | .. | 47 | 35⅓ | 82½ | :0 | 15 | . |
| 15 | Smt. Rajni Jogi | 45 | F | 66 | 52 | 53½ | 105½ | 29 | 16 | .. | 70½ | 50 | 120½ | 59 | 16 | .. |
| 16 | Smt. Dapa Hathi | 50 | F | 572 | 50½ | 54½ | 105 | 59 | 15 | .. | 52 | 55½ | 107½ | 62 | 15 | .. |
| 17 | Smt. Narayani Nayak | 16 | F | 55 | 56 | 49 | 105 | 61 | 16 | .. | 65 | 43 | 108 | 67 | 16 | .. |

| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age | Sex | | | | | | | | | | | | | |
| 18 | Smt. Bhavapari Jogi | 30 | F | 65 | 45½ | 51½ | 97 | 45 | 17 | .. | 74 | 49 | 123 | 55 | 16 | .. |
| 19 | Smt. Ganesi Heebra | 30 | F | 64 | 49½ | 59 | 10½ | 52 | 16 | .. | 51 | 59½ | 110½ | 113 | 16 | .. |
| 20 | Smt. Deabhi Dibhrakha | 25 | F | 45 | 46½ | 52 | 99 | 41 | 17 | .. | 15½ | 17 | 32½ | 20 | 16 | .. |
| 21 | Smt. Gaindi Swamy | 20 | F | 60 | 49½ | 65½ | 114½ | 65 | 15 | .. | 56 | 51½ | 107½ | 64 | 16 | .. |
| 22 | Smt. Bhawary Dharoga | 15 | F | 53 | 47½ | 55 | 102½ | 51 | 15 | .. | 64½ | 55 | 119½ | 64 | 16 | .. |
| 23 | Smt. Narayani Heebra | 27 | F | 67 | 53 | 57½ | 110½ | 53 | 16 | .. | 55 | 55½ | 110½ | 67 | 16 | .. |
| 24 | Smt. Bhalisunga | 14 | F | 60 | 52 | 50½ | 102½ | 57 | 14 | .. | 78 | 27½ | 105½ | 61 | 15 | .. |
| 25 | Smt. Prabhati Khati | 30 | F | 64 | 51½ | 51 | 102½ | 77 | 20 | .. | 64½ | 53½ | 122 | 54 | 20 | .. |
| 26 | Smt. Gulab Nayak | 14 | F | 55 | 55 | 59½ | 114½ | 61½ | 17 | .. | 74 | 39 | 118 | 56 | 16 | .. |
| 27 | Smt. Prabhati Heebra | 22 | F | 50 | 35½ | 57½ | 93 | 56 | 17 | .. | 70½ | 41 | 111½ | 64½ | 16 | .. |
| 28 | Smt. Gulab Swamy | 40 | F | 44 | 56 | 50 | 106 | 55 | 16 | .. | 65 | 55 | 120 | 64½ | 16 | .. |
| 29 | Smt. Shamachandar Sharma | 22 | F | 63 | 59½ | 59 | 118½ | 75 | 20 | .. | 55 | 30 | 85 | 57 | 20 | .. |
| 30 | Shri Chilanji Daroka | 40 | M | 51 | 44½ | 53½ | 98 | 35 | 15 | .. | 44½ | 53½ | 98 | 35 | .. | .. |
| 31 | Shri Mathulal Varma | 20 | M | 66 | 50 | 60 | 110 | 101 | 105 | .. | 50 | 40 | 90 | 63 | 29 | .. |
| 32 | Shri Sheduram Kumar | 25 | M | 65 | 58½ | 39½ | 98 | 54 | 16 | .. | 62½ | 46½ | 108½ | 71 | 17 | .. |
| 33 | Shri Sarifudian Khan | 32 | M | 54 | 44½ | 34½ | 79 | 52 | 15 | .. | 37 | 33 | 70 | 42½ | 15 | .. |
| 34 | Shri Fakir Mohomedkhan | 23 | M | 51 | 32½ | 46 | 78½ | 36 | 15 | .. | 25 | 24½ | 115 | 27 | 17 | .. |
| 35 | Shri Durga Prasad | 20 | M | 63 | 31 | 49 | 80 | 100 | 16 | .. | 60 | 53 | 115 | 69½ | 17 | .. |
| 36 | Shri Kalyannath Jogi | 50 | M | 64½ | 41 | 59½ | 100½ | 53 | 15 | .. | 32½ | 75½ | 108 | 104 | 16 | .. |
| 37 | Shri Gokhaleji Mahal | 18 | M | 60 | 47 | 44½ | 91½ | 30½ | 15 | .. | 60 | 44 | 104 | 30 | 15 | .. |
| 38 | Shri Bhavanji Kharik | 20 | M | 61 | 51½ | 44 | 95½ | 37 | 16 | .. | 58 | 48 | 106 | 42 | 16 | .. |
| 39 | Shri Chouthmalji Mina | 20 | M | 64 | 56 | 53 | 109 | 77 | 15 | .. | 52 | 60 | 11½ | 99 | 15 | .. |
| 40 | Shri Sulaimankhan Samod | 32 | M | 36 | 14½ | 7½ | 22 | 7 | 16 | .. | .. | .. | .. | .. | .. | .. |
| 41 | Shri Navalkishore Sharma | 19 | M | 62 | 56 | 45½ | 101½ | 64 | 15 | .. | 60½ | 48 | 108½ | 76 | 16 | .. |
| 42 | Shri Hanumansahai Nai | 30 | M | 53 | 40 | 56 | 96 | 39 | 17 | .. | 21½ | 19 | 40½ | 14½ | 15 | .. |
| 43 | Shri Chitarmalji Darji | 21 | M | 58 | 46 | 48 | 94 | 79 | 16 | .. | 55 | 50 | 105 | 72 | 16 | .. |
| 44 | Shri Kajodmal Basa | 20 | M | 60 | 46 | 59 | 105 | 35 | 14 | .. | 66½ | 39½ | 101 | 30 | 15 | .. |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | Shri Mamaraj Sharma . . . . | 23 | M | 69 | 58½ | 83 | 135½ | 68 | 15 | .. | 52½ | 44½ | 97 | 60 | 16 | .. |
| 46 | Shri Glarasilal Gujar . . . . | 15 | M | 36 | 28 | 34½ | 62½ | 28 | 14 | .. | .. | .. | .. | .. | .. | .. |
| 47 | Shri Bansidar Bunkar . . . . | 10 | M | 68 | 32 | 44 | 76 | 17 | 15 | .. | 47½ | 32 | 79½ | 16 | 10 | .. |
| 48 | Shri Bansidar Jogi . . . . | 14 | M | 53 | 58½ | 34½ | 93 | 27½ | 15 | .. | 56½ | 51 | 107½ | 39 | 15 | .. |
| 49 | Shri Kailash Narayan Sharma . . | 18 | M | 56 | 34½ | 62½ | 97 | 71 | 15 | .. | 35½ | 67½ | 93 | 89½ | 15 | .. |
| 50 | Shri Shiva Pratap Sharma . . . | 19 | M | 54 | 60 | 35½ | 95½ | 41 | 15 | .. | 69½ | 26 | 95½ | 48½ | 15 | .. |
| 51 | Shri Manoharlal Sharma . . . | 19 | M | 56 | 34½ | 62½ | 97 | 71 | 15 | .. | 25½ | 67½ | 93 | 89 | 15 | .. |
| 52 | Shri Sherkhan Samoth . . . | 10 | M | 65 | 64 | 15½ | 79½ | 11 | 14 | .. | 44½ | 35½ | 80 | 18 | 15 | .. |
| 53 | Shri Multan Meeja . . . . | 18 | M | 46 | 45½ | 48½ | 94 | 31 | 14 | .. | 47 | 42½ | 89½ | 35 | 15 | .. |
| 54 | Shri Banchidar Sharma . . . | 18 | M | 46 | 45 | 39 | 84 | 53 | 16 | .. | 44½ | 69 | 113½ | 135 | 16 | .. |
| 55 | Shri Mulasimhaji Rajput . . . | 18 | M | 53 | 57 | 34 | 91 | 52 | 16 | .. | 64½ | 47½ | 11½ | 83 | 16 | .. |
| 56 | Shri Biratichandra Sharma . . . | 20 | M | 59 | 56½ | 45½ | 102 | 67 | 16 | .. | 61 | 52½ | 113½ | 84 | 16 | .. |
| 57 | Shri Morilal Jha . . . . . | 18 | M | 54 | 41½ | 60½ | 103 | 109 | 16 | .. | 41½ | 62 | 103 | 92 | 16 | .. |
| 58 | Shri Bagwatsahai Ahir . . . . | 16 | M | 48 | 38 | 42 | 81 | 31 | 14 | .. | 47 | 53 | 110 | 43½ | 15 | .. |
| 59 | Shri Babsahai Jha . . . . | 25 | M | 50 | 49 | 54 | 103½ | 54 | 16 | .. | .. | .. | .. | .. | .. | .. |
| 60 | Shri Admalji Bunkar . . . . | 30 | M | 51 | 54½ | 55½ | 110 | 95 | 20 | .. | 49½ | 41½ | 91 | 69 | 20 | .. |
| 61 | Shri Pealhhad Sharma . . . . | 18 | M | 50 | 34½ | 65½ | 100 | 51 | 15 | .. | 54 | 46½ | 100½ | 80 | 15 | .. |
| 62 | Shri Ramchandar Sharma . . . | 15 | M | 44 | 44½ | 47½ | 92 | 40 | 16 | .. | 49 | 47½ | 96½ | 36 | 16 | .. |
| 63 | Shri Bramathilal . . . . | 14 | M | 41 | 42½ | 45½ | 88 | 40 | 16 | .. | 49 | 47½ | 96½ | 36 | 16 | .. |
| 64 | Shri Nathulal Bunkar . . . . | 16 | M | 48 | 47 | 64 | 111 | 95 | 18 | .. | 57½ | 55½ | 113 | 87 | 20 | .. |
| 65 | Shri Kana Nayal . . . . | 15 | M | 48 | 53½ | 56 | 109½ | 85 | 17 | .. | 54 | 61½ | 115½ | 101 | 15 | .. |
| 66 | Shri Gopapchandar Sharma . . . | 17 | M | 50 | 55 | 39½ | 94½ | 29 | 16 | .. | 42 | 42½ | 84½ | 48 | 16 | .. |
| 67 | Shri Ramkishore Sharma . . . | 20 | M | 56 | 52½ | 52½ | 105 | 69 | 16 | .. | 52½ | 60½ | 113 | 96½ | 17 | .. |
| 68 | Shri Veerasimhaji . . . . | 50 | M | 40 | 44 | 52 | 102 | 49 | 16 | .. | 32½ | 80 | 112½ | 123 | 17 | .. |
| 69 | Shri Ananthailal Sharma . . . | 30 | M | 31 | 42 | 59 | 101 | 19 | 14 | .. | 34½ | 59 | 97½ | 37 | 16 | .. |
| 70 | Shri Ajodmal Ghar . . . . | 30 | M | 32 | 45½ | 56 | 100½ | 56 | 14 | | 28½ | 45½ | 74 | 50 | 14 | .. |
| | TOTAL . . . | | | | | | | | | | | | 6667 | 4110 | | |

Date of starting : 16-1-56

No. of Charkha sets : 20

Name of Parishramalaya : Gramseva Mandal, Karoli. Dist. Savai, Rajasthan.

| S. No. | Name of operative | Class of spinner | No. of days of trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13 April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas |
| | | | | Carding | Spg. | Total | | | | Carding | Spg. | Total | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Hariprasad . . . . | 25 M | 73 | 25 | 55 | 80 | 108 | 16 | 32 | 40 | 40 | 80 | 62 | 16 | 18 |
| 2 | Sarvanlal . . . . | 20 M | 73 | 25 | 54 | 79 | 108 | 16 | 32 | 40 | 40 | 80 | 62 | 16 | 18 |
| 3 | Kishanlal . . . . | 28 M | 70 | 23 | 53 | 76 | 66 | 16 | 18¾ | 40 | 40 | 80 | 61 | 16 | 17¾ |
| 4 | Chhotelal . . . . | 29 M | 73 | 25 | 52 | 77 | 66 | 16 | 18¾ | 40 | 40 | 80 | 82 | 16 | 2¾ |
| 5 | Misralal . . . . | 18 M | 68½ | 25 | 55 | 80 | 87 | 15 | 30½ | 40 | 40 | 86 | 85 | 18 | 23¾ |
| 6 | Mularam . . . . | 18 M | 72 | 25 | 55 | 80 | 87 | 15 | 30½ | 40 | 40 | 80 | 72 | 15 | 21¼ |
| 7 | Chatrusinh . . . . | 20 M | 72¾ | 25 | 55 | 80 | 81 | 15 | 28¾ | 40 | 40 | 80 | 75 | 16 | 22¼ |
| 8 | Devilal . . . . | 20 M | 72¾ | 25 | 55 | 80 | 83 | 15 | 30¾ | 40 | 40 | 80 | 67 | 17 | 18¼ |
| 9 | Mogilal . . . . | 19 M | 72¾ | 25 | 53 | 78 | 70 | 16 | 21 | 40 | 40 | 80 | 83 | 16 | 28 |
| 10 | Kishanalal . . . . | 16 M | 73⅝ | 25 | 55 | 80 | 70 | 16 | 21 | 40 | 40 | 80 | 83 | 16 | 28 |
| 11 | Prasadilal . . . . | 18 M | 70¼ | 25 | 53 | 78 | 68 | 14 | 22 | 40 | 40 | 80 | 81 | 15 | 27 |
| 12 | Chandralal . . . . | 16 M | 71¾ | 25 | 55 | 80 | 68 | 14 | 22 | 40 | 40 | 80 | 82 | 15 | 27½ |
| 13 | Panchidevi . . . . | 18 F | 73½ | 25 | 55 | 80 | 62 | 16 | 18 | 40 | 40 | 80 | 85 | 16 | 28½ |
| 14 | Bhagvatidevi . . . . | 25 F | 72¾ | 25 | 55 | 80 | 62 | 16 | 18 | 40 | 40 | 80 | 44 | 16 | 12 |
| 15 | Jankidevi . . . . | 40 F | 52¾ | 25 | 55 | 80 | 48 | 16 | 15 | 40 | 40 | 80 | 84 | 14 | 25 |
| 16 | Misradevi . . . . | 16 F | 72¾ | 25 | 55 | 80 | 48 | 16 | 15 | 40 | 40 | 80 | 6 | 18 | 1½ |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Kaliadevi | 38 F | 63 | 35 | 55 | 80 | 58 | 12 | 18 | 40 | 40 | 80 | 76 | 14 | 24 |
| 18 | Panbai | 16 F | 74 | 25 | 55 | 80 | 60 | 12 | 18 | 40 | 40 | 80 | 62 | 14 | 18 |
| 19 | Jamnidevi | 16 F | 73 | 25 | 55 | 80 | 55 | 13 | 17½ | 40 | 40 | 80 | 38 | 14 | 12 |
| 20 | Soabai | 25 F | 73¾ | 25 | 55 | 80 | 56 | 16 | 17 | 40 | 40 | 80 | 81 | 18 | 23 |
| 21 | Ratnidevi | 25 F | 73 | 25 | 55 | 80 | 70 | 16 | 21 | 40 | 40 | 80 | 84 | 16 | 24¾ |
| 22 | Julrodevi | 40 F | 74 | 25 | 55 | 80 | 68 | 14 | 22 | 40 | 40 | 80 | 37 | 16 | 6½ |
| 23 | Badamidevi | 38 F | 74 | 25 | 55 | 80 | 50 | 16 | 15 | 40 | 40 | 80 | 31 | 18 | 17 |
| 24 | Gulladevi | 40 F | 78 | 25 | 50 | 80 | 50 | 16 | 15 | 40 | 40 | 80 | 78 | 15 | 28 |
| 25 | Badal devi | 29 F | 78 | 25 | 53 | 78 | 48 | 18 | 14 | 40 | 40 | 80 | 45 | 16 | 13½ |
| 26 | Bhuribai | 38 F | 76½ | 25 | 53 | 78 | 48 | 18 | 10 | 40 | 40 | 80 | 45 | 20 | 12½ |
| 27 | Kasturi | 16 F | 72 | 25 | 55 | 80 | 34 | 16 | 10 | 40 | 40 | 80 | 14 | 18 | 3½ |
| 28 | Narayanibai | 30 F | 78 | 25 | 55 | 80 | 50 | 18 | 13 | 40 | 40 | 80 | 35 | 20 | 8¼ |
| 29 | Kokiladevi | 38 F | 76 | 25 | 48 | 73 | 51 | 16 | 15 | 40 | 40 | 80 | 26 | 18 | 6¾ |
| 30 | Gange | 18 F | 58 | 25 | 53 | 78 | 34 | 15 | 10½ | 40 | 40 | 80 | 13 | 16 | 4 |
| 31 | Gangadevi | 25 F | 58 | 25 | 55 | 80 | 36 | 14 | 10½ | 40 | 40 | 80 | 13 | 16 | 4 |
| 32 | Sampatibai | 38 F | 74 | 25 | 53 | 78 | 33 | 16 | 8½ | 40 | 40 | 80 | 14 | 18 | 4 |
| 33 | Rukhamani | 16 F | 53 | 25 | 53 | 78 | 34 | 16 | 8¾ | 40 | 40 | 80 | 15 | 18 | 4¼ |
| 34 | Gyashidevi | 30 F | 33¾ | 25 | 55 | 80 | 35 | 14 | 10½ | 40 | 40 | 80 | 14 | 16 | 4 |
| 35 | Bhuridevi | 35 F | 68 | 25 | 55 | 80 | 50 | 20 | 12½ | 40 | 40 | 80 | 36 | 24 | 8¼ |
| 36 | Bhagavatibai | 30 F | 66 | 25 | 55 | 80 | 50 | 16 | 15 | 40 | 40 | 80 | 45 | 17 | 13 |
| 37 | Kampuribai | 22 F | 50 | 25 | 55 | 80 | 34 | 15 | 10½ | 40 | 40 | 80 | 13 | 16 | 3¾ |
| 38 | Saraswati | 18 F | 67 | 25 | 55 | 80 | 40 | 18 | 11½ | 40 | 40 | 80 | 30 | 20 | 6¾ |
| 39 | Singalal | 16 M | 72 | 25 | 55 | 80 | 71 | 16 | 21 | 40 | 40 | 80 | 163 | 14 | 60 |
| 40 | Sultankhan | 18 M | 76 | 25 | 52 | 77 | 45 | 16 | 13¼ | 40 | 40 | 80 | 136 | 14 | 42¾ |
| | TOTAL | | | | | | | | | | | 3200 | 2197 | | |

No. of Charkha sets : 20

Ambar Charkha Parishramalaya : Udaipur (Rajasthan)

Date of starting : 10-1-56

| S. No. | Name of operative | Class of operative | No. of days of attendance | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work hours | | | | | | Duration of work hours | | | | | |
| | | | | Carding | Spinning | Total | Production in hanks | Count of yarn spun | Waste in process (Tolas) | Carding | Spinning | Total | Production in hanks | Count of yarn spun | Waste in process (Tolas) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Keshrara Pira Goma . . . | 31 M | 78 | 18½ | 61 | 79½ | 39 | 10 | 22 | 19½ | 54 | 73½ | 61 | 9 | 16 |
| 2 | Dohara Pira Devra . . . | 35 M | 69 | 20 | 53 | 73 | 39 | 10 | 16 | 19 | 58 | 77 | 56 | 8 | 14 |
| 3 | Husia Pira Jagga . . . | 35 M | 78 | 24 | 51 | 75 | 39 | 11 | 18 | 19 | 32 | 51 | 42 | 10 | 9 |
| 4 | Cheetar Sinha M. Sinha . . | 32 M | 77 | 17 | 54 | 71 | 40 | 10 | 15 | 18 | 33 | 51 | 42½ | 18 | 18 |
| 5 | Keshia Pira Ratna . . . | 28 M | 76 | 18 | 47½ | 65½ | 36 | 9 | 15 | 19 | 53 | 72 | 57 | 18 | 18 |
| 6 | Sadik Pira Ramjan . . . | 27 M | 78 | 22 | 48 | 70 | 36 | 10 | 16 | 15 | 46 | 62 | 54 | 18 | 11 |
| 7 | Oga Pira Uda . . . . | 38 M | 8 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8 | Mada Pira Ramsinha. . . | 37 M | 57 | 21 | 55 | 76 | 40 | 10 | 17 | 12 | 35 | 47 | 30 | 12 | 10 |
| 9 | Devi Pira Khujai . . . | 38 F | 67 | 22 | 55 | 77 | 27 | 9 | 17 | 12 | 35 | 48 | 38 | 18 | 11 |
| 10 | Shankarlal . . . . . | 18 M | 43 | 46 | 37 | 83 | 45 | 13 | 10 | 50 | 56 | 106 | 43 | 13 | 10 |
| 11 | Shivlal . . . . . | 50 M | 55 | 46 | 40 | 86 | 46 | 15 | 15 | 39 | 35 | 74 | 50 | 16 | 10 |
| 12 | Manoharlal . . . . . | 30 M | 58 | 35 | 30 | 65 | 15 | 12 | 7 | 46 | 56 | 102 | 20 | 13 | 5 |
| 13 | Madhavlal . . . . . | 35 M | 37 | 24 | 15 | 39 | 11 | 13 | 10 | 36 | 31 | 67 | 29 | 18 | 10 |
| 14 | Radhadevi . . . . . | 16 F | 55 | 40 | 37 | 77 | 30 | 13 | 10 | 56 | 59 | 115 | 23 | 16 | 5 |
| 15 | Roopkala Bai . . . . | 22 F | 30 | 22 | 25 | 47 | 10 | 13 | 5 | 21 | 20 | 41 | 8 | 16 | 3 |
| 16 | Jashoda Devi . . . . | 35 F | 56 | 30 | 38 | 68 | 30 | 13 | 10 | 56 | 59 | 115 | 23 | 16 | 10 |
| 17 | Ravashankar Courshankar . . | 39 M | 53 | 29¼ | 57½ | 85¾ | 39¾ | 10 | 18 | 92 | 35½ | 47½ | 46 | 12 | 15 |
| 18 | Devisinha Zunzarsinha . . | 45 M | 66 | 99 | 60 | 79 | 39¾ | 9 | 15 | 14 | 31¼ | 45¼ | 41 | 15 | 10 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | P. Devachamar | 37 | M | 52 | 33½ | 56½ | 89 | 35 | 11 | 15½ | 6 | 37½ | 43½ | 36 | 10 | 4 |
| 20 | Lala P. Kishan | 36 | M | 55 | 43½ | 51½ | 95 | 28 | 10 | 19 | 31 | 54 | 85 | 40 | 12 | 13 |
| 21 | Mohan P. Lalu | 31 | M | 39 | 38½ | 53 | 91½ | 31 | 9 | 16 | 42 | 48½ | 90½ | 36 | 12 | 14 |
| 22 | B. P. Lala | 35 | M | 55 | 36 | 48 | 84 | 30 | 8 | 15 | 36 | 53½ | 89½ | 57 | 10 | 14 |
| 23 | M. P. Kishana | 50 | M | 34 | 32½ | 49 | 81½ | 34 | 10 | 15 | 15 | 24 | 39 | 26½ | 11 | 4½ |
| 24 | A. P. Pala | 35 | M | 55 | 38½ | 55½ | 94 | 30½ | 9 | 16 | 40 | 49 | 89 | 52 | 11 | 15 |
| 25 | D. P. Nara | 37 | M | 51 | 37½ | 61 | 98½ | 29 | 9 | 15½ | 49½ | 51½ | 92 | 47½ | 12 | 15 |
| 26 | U. P. Issa | 23 | M | 41 | 47½ | 49 | 96½ | 25½ | 10 | 16 | 30½ | 35 | 65½ | 34½ | 12 | 10 |
| 27 | M. P. Gangaram | 44 | M | 40 | 38½ | 63 | 101½ | 26 | 10 | 14 | 25 | 35 | 60 | 21 | 12 | 8 |
| 28 | G. P. Jagannath | 36 | M | 40 | 44 | 50 | 94 | 26½ | 9 | 16 | 41 | 51 | 92 | 31 | 11 | 13½ |
| 29 | N. P. Akade | 51 | M | 41 | 33 | 64 | 97 | 26 | 10 | 16 | 41 | 50½ | 91½ | 36 | 11 | 13 |
| 30 | G. P. Mura | 25 | M | 27 | 57 | 40½ | 97½ | 19 | 10 | 11 | 44 | 42 | 86 | 48 | 11 | 19 |
| 31 | K. P. Khudabaksh | 22 | M | 28 | 57 | 43 | 100 | 14 | 9 | 10 | 45½ | 49½ | 95 | 42 | 12 | 15 |
| 32 | Radhakishan R. P. | 48 | F | 28 | 65 | 46 | 111 | 11 | 9 | 11½ | 42½ | 58 | 190½ | 41 | 14 | 14 |
| 33 | G. P. Pardha | 33 | M | 28 | 56 | 40 | 96 | 10 | 9 | 10 | 42 | 59 | 101 | 42½ | 13 | 14 |
| 34 | N. P. Surajmal. | 24 | M | 28 | 56½ | 39 | 95½ | 9 | 9 | 12 | 43 | 50 | 93 | 44 | 12 | 15 |
| 35 | M. P. Roopa | 42 | M | 27 | 70 | 30 | 100 | 10½ | 9 | 11 | 42 | 50 | 92 | 36½ | 12 | 14 |
| 36 | M. P. Oda | 45 | M | 19 | 62 | 32½ | 94½ | 8 | 8 | 10½ | 21 | 19½ | 40½ | 14½ | 11 | 5½ |
| 37 | M. P. Pratapsinha | 38 | M | 25 | 49 | 40 | 88 | 7½ | 9 | 9 | 22½ | 30½ | 53 | 21½ | 11 | 7 |
| 38 | D. P. Ghissinha | 42 | M | 24 | 42 | 29 | 71 | 9½ | 9 | 8 | 37 | 48 | 85 | 41 | 12 | 12 |
| 39 | D. P. Dhalabai | 38 | M | 35 | 52 | 25 | 77 | 9 | 8 | 8 | 28 | 54 | 82 | 30 | 12 | 10 |
| 40 | G. P. Panna | 39 | M | 25 | 33 | 35 | 68 | 12 | 9 | 9 | 34 | 55 | 89 | 36 | 13 | 11 |
| 41 | U. P. Nanga | 33 | M | 25 | 41 | 25½ | 67½ | 12 | 10 | 9 | 33 | 59 | 92 | 34 | 12 | 11 |
| 42 | D. P. Ankha | 34 | M | 25 | 47 | 32 | 79 | 8½ | 8 | 9 | 15 | 14½ | 29½ | 15 | 9 | 4 |
| 43 | K. P. Bhavra | 27 | M | 21 | 24 | 34 | 58 | 11 | 8 | 8 | 23 | 31½ | 54½ | 20 | 11 | 19 |
| 44 | N. P. Mura | 34 | M | 25 | 53½ | 31 | 84½ | 8½ | 8 | 7½ | 47 | 46 | 93 | 36 | 12 | 13 |
| 45 | H. P. Lalia | 38 | M | 25 | 53½ | 29½ | 83 | 7 | 8 | 7 | 41 | 52½ | 93½ | 37 | 10 | 12 |
| 46 | Madanlal | 18 | M | 36 | 40 | 30 | 70 | 70 | 13 | 6 | 37 | 40 | 77 | 20 | .. | .. |
| 47 | Mavarlal | 20 | M | 36 | 39 | 33 | 72 | 19 | 13 | 13 | 48 | 35 | 83 | 20 | .. | .. |
| 48 | M. P. Padma | 35 | F | 25 | 54 | 33 | 83 | 9 | 8 | 8 | 38 | 58 | 96 | 39 | 12 | 13 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 49 | P. P. Narian . . . . | 40 M | 25 | 43½ | 30 | 73½ | 9½ | 8 | 8 | 48 | 54½ | 101½ | 31 | 12 | 14 |
| 50 | Ananda Mera . . . . | 32 M | 23 | 54 | 29½ | 83½ | 9 | 8 | 8 | 27½ | 44 | 71½ | 29 | 10 | 9 |
| 51 | D. P. Nanji . . . . | 49 M | 25 | 37 | 39½ | 76½ | 16½ | 9 | 8½ | 46 | 50 | 96 |  |  | 14 |
| 52 | R. P. Bhagawana . . . | 35 M | 25 | 41 | 32½ | 73½ | 10 | 8 | 8 | 45 | 49 | 94 | 28½ | 11 | 14 |
| 53 | Meria P. Padma . . . | 40 M | 25 | 37 | 37 | 74 | 7½ | 9 | 6 | 47 | 46 | 93 | 15½ | 12 | 9½ |
| 54 | S. P. Gopal . . . . | 37 M | 23 | 36 | 40½ | 76½ | 10 | 9 | 6½ | 34½ | 46½ | 81 | 25 | 17 | 14½ |
| 55 | M. P. Motiram . . . | 23 M | 14 | 36 | 37 | 73 | 12½ | 9 | 6 | 14 | 15 | 29 | 5 | 10 | 4 |
| 56 | Gajanand Pita. . . . | 15 M | 58 | 27 | 29 | 56 | 37 | 13 | 13 | 40 | 50 | 90 | 25 | 18 | 10 |
| 57 | Kundanmal . . . . | 18 M | 53 | 20 | 55 | 75 | 20 | 13 | 6 | 30 | 35 | 65 | 10 | 16 | 5 |
| 58 | Liaram . . . . | 14 M | 56 | 38 | 52 | 90 | 30 | 13 | 10 | 35 | 35 | 70 | 25 | 16 | 6 |
| 59 | Laxmanji . . . . | 45 M | 51 | 36 | 40 | 76 | 11 | 10 | 11 | 37 | 34 | 71 | 19 | 11 | 8 |
| 60 | Amballaji . . . . | 35 M | 56 | 37 | 56 | 93 | 17 | 11 | 6 | 39 | 37 | 76 | 25 | 18 | 8 |
| 61 | Ruplalji . . . . | 31 M | 40 | 20 | 40 | 70 | 15 | 10 | 5 | 40 | 37 | 77 | 15 | 18 | 5 |
| 62 | Kanaialalji . . . . | 18 M | 53 | 45 | 52 | 97 | 45 | 13 | 16 | 50 | 70 | 120 | 68 | 18 | 10 |
| 63 | Kameshwarprasad Sharma . | 16 M | 46 | 34 | 53 | 87 | 24 | 12 | 10 | 50 | 30 | 85 | 16 | 16 | .. |
| 64 | Roshanlal . . . . | 19 M | 42 | 16 | 16 | 32 | 10 | 10 | 5 | 37 | 36 | 73 | 22 | 11 | 7 |
| 65 | Gavarlal . . . . | 18 M | 9 | 22 | 25 | 47 | 10 | 13 | 5 | 48 | 35 | 93 | 20 | 18 | 7 |
| 66 | Husmibai . . . . | F | 29 | 16 | 16 | 32 | 4 | 10 | 4 | 32 | 37 | 68 | 8 | 16 | 3 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 5012½ | 2100 |  |  |

No. 92
Name of Parishramalaya : SABALGARH (M.B.)

Date of starting : 16-1-56
Number of Charkha sets : 20

| S. No. | Name of operative | Class of spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | | | | | | | | | | | | | |
| 1 | Minakumari . . . . . | 14 | 57 | 45 | 45 | 90 | 30 | 11 | 12¼ | | | | | | |
| 2 | Gangadevi . . . . . | 35 | 59 | 45 | 45 | 90 | 30 | 11 | 12½ | | | | | | |
| 3 | Shantibai . . . . . | 28 | 42 | | | | | | | | | | | | |
| 4 | Ramdevibai . . . . . | 35 | 58 | 45 | 45 | 90 | 31 | 10 | 15¼ | | | | | | |
| 5 | Laltabai . . . . . | 35 | 73 | 45 | 45 | 90 | 62 | 15 | 23¼ | 50 | 70 | 120 | 120 | 18 | 40 |
| 6 | Pannibai . . . . . | 40 | 74 | 45 | 45 | 90 | 62 | 15 | 22¾ | 50 | 70 | 120 | 120 | 18 | 40 |
| 7 | Ramhetsharma . . . . . | 22 | 33 | | | | | | | | | | | | |
| 8 | Sonibai . . . . . | 45 | 66 | 45 | 45 | 90 | 44 | 12 | 24½ | 65 | 55 | 120 | 60 | 12 | 30 |
| 9 | Sukhbai . . . . . | 50 | 71 | 45 | 45 | 90 | 56 | 12 | 29¾ | 65 | 55 | 120 | 120 | 13 | 60 |
| 10 | Godavaribai . . . . . | 25 | 71 | 45 | 45 | 90 | 56 | 12 | 29¾ | 65 | 55 | 120 | 120 | 13 | 60 |
| 11 | Krantibai . . . . . | 30 | 72 | 45 | 45 | 90 | 44 | 12 | 17½ | 60 | 60 | 120 | 60 | 14 | 25 |
| 12 | Ratanbai . . . . . | 40 | 29 | | | | | | | | | | | | |
| 13 | Shivcharan Shukla . . . . | 20 | 67 | 45 | 45 | 90 | 36 | 15 | 13 | 60 | 60 | 120 | 60 | 14 | 25 |
| 14 | Sureshchandra . . . . . | 19 | 68 | 45 | 45 | 90 | 36 | 15 | 12 | 60 | 60 | 120 | 60 | 14 | 25 |
| 15 | V. K. Deshpande . . . . | 30 | 55 | 45 | 45 | 90 | 74 | 14 | 28 | 60 | 60 | 120 | 135 | 14 | 60 |
| 16 | Rajgopalji . . . . . | 18 | 54 | 45 | 45 | 90 | 59½ | 12 | 26 | 20 | 20 | 40 | 25 | 14 | 10 |
| 17 | Saraswatibai . . . . . | 55 | 67 | 45 | 45 | 90 | 67 | 14 | 24 | 60 | 60 | 120 | 120 | 14 | 55 |
| 18 | Harivilas . . . . . | 18 | 68 | 45 | 45 | 90 | 59½ | 12 | 26 | 55 | 65 | 120 | 120 | 14 | 55 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Kambodabai | 26 | 68 | 45 | 45 | 90 | 122 | 15 | 42 | 65 | 55 | 120 | 150 | 15 | 60 |
| 20 | Chaturbhjsharma | 21 | 68 | 45 | 45 | 90 | 48 | 11 | 23 | 65 | 55 | 120 | 75 | 13 | 40 |
| 21 | Manjilal Rajkator | 19 | 61 | 45 | 45 | 90 | 33 | 12 | 13 | 65 | 55 | 120 | 60 | 13 | 30 |
| 22 | Shivcharan | 20 | 61 | 45 | 45 | 90 | 33 | 12 | 11 | 65 | 55 | 120 | 60 | 13 | 30 |
| 23 | Sonaram | 12 | 33 |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Chantoli | 13 | 33 |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Kalyansingh Jadav | 17 | 32 |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | Vasudev Prasad | 17 | 32 |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 | Kambodsinh Yadav | 20 | 7 |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | Ramcharanlal Gupta | 20 | 46 | 30 | 30 | 60 | 35 | 13 | 14 | 44 | 44 | 88 | 44 | 14 | 20 |
| 29 | Ramswarup Gupta | 18 | 59 | 45 | 45 | 90 | 32 | 14 | 12 | 55 | 65 | 120 | 75 | 18 | 30 |
| 30 | Krishnarao Bagmor | 56 | 18 |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | Damodarprasad | 18 | 61 | 45 | 45 | 90 | 48 | 13 | 19 | 65 | 55 | 120 | 75 | 13 | 40 |
| 32 | Shivcharan Gupta | 21 | 44 | 45 | 45 | 90 | 35 | 13 | 12 |  |  |  |  |  |  |
| 33 | Narayanibai | 31 | 61 | 45 | 45 | 90 | 30 | 11 | 16 | 65 | 55 | 120 | 60 | 12 | 30 |
| 34 | Lakshmibai | 45 | 61 | 45 | 45 | 90 | 30 | 11 | 11 | 65 | 55 | 120 | 60 | 12 | 30 |
| 35 | Harilal | 15 | 18 |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 | Babulal | 12 | 20 |  |  |  |  |  |  |  |  |  |  |  |  |
| 37 | Bundiram | 13 | 24 | 18 | 18 | 36 | 40 | 19 | 13 | 10 |  |  |  |  |  |
| 38 | Murailal | 22 | 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | Bhanvarsinh | 18 | 14 |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 | Harikishan | 15 | 12 |  |  |  |  |  |  |  |  |  |  |  |  |
| 41 | Rambai | 22 | 47 | 45 | 45 | 90 | 46 | 12 | 20 | 55 | 65 | 120 | 120 | 13 | 55 |
|  | TOTAL |  |  |  |  |  |  |  |  |  |  | 2528 | 1899 |  |  |

No. 93

Name of Parishramalaya : SHIVPURI (M. B.)

Date of starting : 9-1-56.

Number of Charkha sets : 3c

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas |
| | | | | Carding | Spg. | Total | | | | Carding | Spg. | Total | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 6 |
| | | Age | | | | | | | | | | | | | |
| 1 | Kesarbai . . . . | 40 | 71 | 60 | 60 | 120 | 60 | 28 | 20 | 35 | 35 | 70 | 76 | 20 | 23 |
| 2 | Shantabai . . . . | 16 | 75 | 60 | 60 | 120 | 37 | 18 | 13 | 28 | 28 | 56 | 42 | 16 | 16 |
| 3 | Radhabai . . . . | 45 | 76 | 60 | 60 | 120 | 45 | 13 | 14 | 35 | 35 | 70 | 61 | 16 | 26 |
| 4 | Narayandevi . . . . | 45 | 75 | 40 | 35 | 75 | 31 | 13 | 15 | 35 | 35 | 70 | 59 | 14 | 26 |
| 5 | Narayanidevi . . . . | 20 | 80 | 60 | 60 | 120 | 74 | 19 | 24 | 60 | 60 | 120 | 90 | 18 | 29 |
| 6 | Vimladevi . . . . | 25 | 80 | 60 | 60 | 120 | 75 | 19 | 24 | 60 | 60 | 120 | 102 | 19 | 32 |
| 7 | Dayaram Koli . . . . | 35 | 79 | 60 | 60 | 120 | 70 | 16 | 16 | 60 | 60 | 120 | 88 | | 33 |
| 8 | Harkorbai . . . . | 25 | 79 | 60 | 60 | 120 | 69 | 16 | 16 | 60 | 60 | 120 | 87 | 16 | 33 |
| 9 | Vraimohan . . . . | 18 | 69 | 60 | 60 | 120 | 45 | 16 | 20 | 35 | 35 | 70 | 62 | 16 | 20 |
| 10 | Shyamsaran . . . . | 15 | 68 | 35 | 35 | 70 | 29 | 16 | 12 | 28 | 28 | 56 | 24 | 16 | 12 |
| 11 | Sunarbai . . . . | 25 | 71 | 60 | 60 | 120 | 68 | 14 | 14 | 60 | 60 | 120 | 91 | 18 | 31 |
| 12 | Ranibai . . . . | 35 | 71 | 60 | 60 | 120 | 68 | 14 | 14 | 60 | 60 | 120 | 103 | 18 | 35 |
| 13 | Kamladevi . . . . | 35 | 66 | 60 | 60 | 120 | 45 | 16 | 16 | 35 | 35 | 70 | 62 | 17 | 21 |

| 1 | 2 | 3 Age | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | Shakuntaladevi | 15 | 65 | 40 | 30 | 70 | 28 | 16 | 16 | 35 | 35 | 70 | 58 | 16 | 21 |
| 15 | Harkhibai | 25 | 63 | 60 | 60 | 120 | 73 | 16 | 16 | 36 | 36 | 72 | 60 | 16 | 23 |
| 16 | Lachhibai | 21 | 70 | 60 | 60 | 120 | 73 | 16 | 16 | 35 | 35 | 70 | 74 | 16 | 28 |
| 17 | Ghanshyam Sharma | 17 | 63 | 50 | 40 | 90 | 38 | 14 | 15 | 35 | 35 | 70 | 60 | 16 | 20 |
| 18 | Vijaysingh | 19 | 68 | 60 | 60 | 120 | 82 | 16 | 30 | 60 | 60 | 20 | 150 | 20 | 45 |
| 19 | Gomabai | 38 | 68 | 60 | 60 | 120 | 62 | 20 | 20 | 60 | 60 | 20 | 138 | 18 | 45 |
| 20 | Kamlabai | 21 | 66 | 35 | 30 | 65 | 30 | 13 | 18 | 28 | 28 | 56 | 49 | 16 | 17 |
| 21 | Shushiladevi | 45 | 60 | 60 | 60 | 120 | 45 | 13 | 20 | 35 | 35 | 70 | 60 | 15 | 30 |
| 22 | Durgadevi | 45 | 58 | 35 | 30 | 65 | 16 | 13 | 10 | 28 | 28 | 56 | 40 | 15 | 16 |
| 23 | Durshadkhan | 16 | 65 | 60 | 60 | 120 | 57 | 14 | 21 | 35 | 35 | 70 | 90 | 16 | 35 |
| 24 | Prabhukoli | 15 | 51 | .. | .. | .. | .. | .. | .. | 35 | 35 | 70 | 60 | 15 | 24 |
| 25 | Ashanand | 28 | 45 | 30 | 25 | 55 | 19 | 13 | 9 | 28 | 28 | 56 | 35 | 14 | 15 |
| 26 | Jankiprasad | 20 | 42 | 30 | 30 | 60 | 38 | 16 | 15 | 50 | 60 | 120 | 93 | 16 | 31 |
| 27 | Ramgopal | 30 | 61 | 60 | 60 | 120 | 51 | 14 | 22 | 60 | 61 | 121 | 71 | 14 | 32 |
| 28 | Morikhan | 19 | 59 | 60 | 60 | 120 | 64 | 20 | 20 | 35 | 35 | 70 | 90 | 16 | 41 |
| 29 | Mati Devi | 55 | 57 | 40 | 35 | 75 | 36 | 13 | 18 | 35 | 35 | 70 | 60 | 19 | 20 |
| 30 | Ramkali | 20 | 57 | 60 | 60 | 120 | 45 | 13 | 22 | 35 | 35 | 70 | 60 | 19 | 20 |
| 31 | Abdul Ajij | 16 | 50 | 60 | 60 | 120 | 31½ | 12 | 15 | 35 | 35 | 70 | 60 | 60 | 21 |
| 32 | Ruvval | 15 | 48 | 60 | 60 | 120 | 34½ | 12 | 16 | 35 | 35 | 70 | 60 | 16 | 23 |
| 33 | Gokulbai | 15 | 49 | 60 | 60 | 120 | 40 | 13 | 18 | 35 | 35 | 70 | 60 | 14 | 27 |
| 34 | Dakhibai | 45 | 42 | 35 | 35 | 70 | 34 | 12 | 20 | 60 | 60 | 120 | 89 | 12 | 39 |
| 35 | Savitridevi | 18 | 54 | 60 | 60 | 120 | 46 | 12 | 19 | 60 | 60 | 120 | 90 | 16 | 35 |
| 36 | Surjibai | 45 | 54 | 60 | 60 | 120 | 46 | 12 | 19 | 60 | 60 | 120 | 90 | 16 | 35 |
| 37 | Tarunadevi | 23 | 50 | 30 | 30 | 60 | 29 | 14 | 12 | 28 | 28 | 56 | 60 | 16 | 22 |
| 38 | Ayodhyaprasad | 19 | 43 | 30 | 30 | 60 | 30 | 12 | 16 | 35 | 35 | 70 | 60 | 14 | 26 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | Mangalchandra . . . . | 18 | 48 | 30 | 30 | 60 | 34 | 16 | 13 | 60 | 60 | 120 | 77 | 20 | 22 |
| 40 | Ramdas . . . . | 19 | 33 | 32 | 38 | 70 | 22 | 16 | 8 | 35 | 35 | 70 | 60 | 20 | 30 |
| 41 | Sukhlal . . . . | 16 | 39 | 30 | 35 | 65 | 17 | 14 | 8 | 45 | 45 | 90 | 37 | 14 | 15 |
| 42 | Gyrsiram . . . . | 15 | 35 | 30 | 35 | 65 | 17 | 14 | 7 | 35 | 35 | 70 | 60 | 15 | 22 |
| 43 | Magoli Koli . . . . | 12 | 42 | 60 | 60 | 120 | 37 | 14 | 16 | 60 | 60 | 120 | 64 | 14 | 27 |
| 44 | Savitridevi . . . . | 35 | 52 | 60 | 60 | 120 | 53 | 16 | 21 | 60 | 60 | 120 | 91 | 17 | 33 |
| 45 | Sugribai . . . . | 50 | 45 | 40 | 40 | 80 | 35 | 14 | 18 | 35 | 35 | 70 | 62 | 10 | 30 |
| 46 | Maksudanbai . . . . | 30 | 43 | 40 | 40 | 80 | 35 | 14 | 18 | 42 | 42 | 84 | 39 | 17 | 15 |
| 47 | Aryaranbai . . . . | 35 | 48 | 60 | 60 | 120 | 45 | 14 | 20 | 60 | 60 | 120 | 80 | 15 | 32 |
| 48 | Anvaribai . . . . | 13 | 46 | 60 | 60 | 120 | 40 | 14 | 16 | 28 | 28 | 56 | 45 | 16 | 17 |
| 49 | Hajrabai . . . . | 50 | 44 | 60 | 60 | 120 | 47 | 12 | 21 | 35 | 35 | 70 | 63 | 16 | 27 |
| 50 | Jamilbai . . . . | 13 | 40 | 45 | 37 | 72 | 21 | 11 | 9 | 42 | 42 | 84 | 50 | 15 | 23 |
| 51 | Narsavanvai . . . . | 35 | 43 | 40 | 38 | 78 | 26 | 11 | 15 | 28 | 28 | 56 | 38 | 12 | 17 |
| 52 | Varsharnbai . . . . | 30 | 35 | 30 | 30 | 60 | 50 | 12 | 15 | 28 | 28 | 56 | 42 | 12 | 24 |
| 53 | Baimabai . . . . | 25 | 40 | 30 | 30 | 60 | 23 | 12 | 12 | 28 | 28 | 56 | 45 | 16 | 22 |
| 54 | Shahijadibai . . . . | 20 | 40 | 30 | 30 | 60 | 23 | 12 | 12 | 42 | 42 | 84 | 45 | 16 | 22 |
| 55 | Nurjahbai . . . . | 35 | 37 | 30 | 30 | 60 | 20 | 14 | 9 | 28 | 28 | 56 | 44 | 16 | 18 |
| 56 | Sakinabai . . . . | 18 | 39 | 30 | 30 | 60 | 20 | 14 | 9 | 28 | 28 | 56 | 48 | 16 | 20 |
| 57 | Sugarabai . . . . | 40 | 37 | 30 | 30 | 60 | 25 | 13 | 12 | 42 | 42 | 84 | 50 | 14 | 21 |
| 58 | Sagrabai . . . . | 20 | 38 | 30 | 30 | 60 | 24 | 13 | 11 | 42 | 42 | 84 | 55 | 14 | 21 |
| 59 | Hasinabai . . . . | 14 | 34 | 30 | 30 | 60 | 15 | 12 | 8 | 42 | 42 | 84 | 25 | 12 | 11 |
| 60 | Gafuralbai . . . . | 35 | 33 | 30 | 30 | 60 | 14 | 12 | 8 | 28 | 28 | 56 | 25 | 12 | 11 |
| 61 | Hajrabai . . . . | 25 | 33 | 30 | 30 | 60 | 36 | 13 | 16 | 35 | 35 | 70 | 64 | 14 | 25 |
| | TOTAL . . . | | | | | | | | | | | 4995 | 3973 | | |

Name of Parishramalaya: SAJAPUR (M. B.)

Date of starting : 23-1-56
Number of Charkha sets : 17

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas | Duration of work (Hours) | | | Prodn. hanks | Count | Loss Tolas |
| | | | | Carding | Spg. | Total | | | | Carding. | Spg. | Total | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Sri Harishchandraji | 42 M | 66 | 60 | 60 | 120 | 62 | 16 | 31 | 40 | 40 | 80 | 47 | 16 | 23 |
| 2 | Sri Devilal Sharma | 52 M | 58½ | 60 | 60 | 120 | 51 | 16 | 25½ | 12 | 12 | 24 | 16 | 1 | 8 |
| 3 | Sri Mulchandji | 21 M | 67 | 60 | 60 | 120 | 58 | 12 | 29 | 48 | 48 | 96 | 35 | 12 | 17½ |
| 4 | Sri Gedalal | 22 M | 58 | 60 | 60 | 120 | 70 | 15 | 48 | 8 | 8 | 16 | 5 | 13 | 3½ |
| 5 | Sri Rajaram | 32 M | 71 | 60 | 60 | 120 | 43 | 22 | 29½ | 60 | 60 | 120 | 55 | 18 | 37½ |
| 6 | Sri Devilalji Zalaji | 22 M | 47 | 60 | 60 | 120 | 51 | 13 | 45 | .. | .. | .. | .. | .. | .. |
| 7 | Sri Sardarkhan | 18 M | 58½ | 54 | 54 | 108 | 31 | 31 | 21 | 16 | 16 | 32 | 2 | 16 | 1 |
| 8 | Sri Savarkhan | 17 M | 66½ | 60 | 60 | 120 | 43 | 14 | 29½ | 40 | 40 | 80 | 10 | 13 | 6¼ |
| 9 | Sri Durgasingh | 21 M | 61 | 60 | 60 | 120 | 31½ | 12 | 22 | 20 | 20 | 40 | 10 | 13 | 6¾ |
| 10 | Sri Shivnarayan | 19 M | 57 | 60 | 60 | 120 | 51 | 13 | 35 | 40 | 40 | 80 | 66 | 12 | 45 |
| 11 | Shm. Taradevi Saksena | 45 F | 57 | 60 | 60 | 120 | 39 | 19 | 26¾ | 60 | 60 | 120 | 41 | 16 | 28 |
| 12 | Shm. Kantabai Durve | 34 F | 71 | 60 | 60 | 120 | 60 | 16 | 41 | 60 | 60 | 120 | 64 | 16 | 44 |
| 13 | Shm. Sushilabai | 36 F | 59½ | 56 | 56 | 112 | 32 | 14 | 22 | 40 | 40 | 80 | 32 | 16 | 22 |
| 14 | Shm. Anandibai | 40 F | 58½ | 60 | 60 | 120 | 68 | 12 | 46 | 48 | 48 | 96 | 83 | 18 | 57 |
| 15 | Shm. Gangabai | 40 F | 55 | 60 | 60 | 120 | 45 | 16 | 41 | 32 | 32 | 64 | 40 | 18 | 27½ |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Shm. Ramibai | 45 | F | 58 | 44 | 44 | 88 | 41 | 14 | 21 | 60 | 60 | 120 | 64 | 15 | 44 |
| 17 | Shm. Nanvaribai | 22 | F | 54½ | 56 | 56 | 112 | 32 | 15 | 22 | 40 | 40 | 80 | 25 | 13 | 17 |
| 18 | Shm. Muhidaris | 23 | F | 57 | 60 | 60 | 120 | 78 | 15 | 53 | 40 | 40 | 80 | 53 | 13 | 36 |
| 19 | Shm. Lakshmibai Bavpura | 45 | F | 60 | 60 | 60 | 120 | 63 | 16 | 43 | 52 | 52 | 104 | 78 | 17 | 53 |
| 20 | Shm. Parvatibai | 50 | F | 62 | 60 | 60 | 120 | 36 | 14 | 25 | 60 | 60 | 120 | 48 | 16 | 43 |
| 21 | Sri M. Sadiz | 14 | M | 56 | 60 | 60 | 120 | 52 | 117 | 35 | 52 | 52 | 104 | 51 | 16 | 34 |
| 22 | Shm. Anpurnabai | 25 | F | 26½ | 38 | 38 | 76 | 12 | 16 | 8 | .. | .. | .. | .. | .. | .. |
| 23 | Sri Babulal | 20 | M | 43 | 60 | 60 | 120 | 38 | 14 | 26 | 40 | 40 | 80 | 37 | 11 | 25 |
| 24 | Sri Munshikhan | 15 | M | 46 | 60 | 60 | 120 | 32 | 12 | 22 | 48 | 48 | 96 | 34 | 14 | 23 |
| 25 | Sri Ajijkhan | 16 | M | 46 | 60 | 60 | 120 | 36½ | 15 | 25 | 48 | 48 | 96 | 23 | 11 | 16 |
| 26 | Sri Abdul Rasul | 18 | M | 41 | 56 | 56 | 112 | 11 | 12 | 8 | 56 | 56 | 112 | 16 | 8 | 11½ |
| 27 | Sri Kamal | 14 | M | 39 | 56 | 56 | 112 | 22¼ | 10 | 15 | 48 | 48 | 96 | 29 | 11 | 20 |
| 28 | Sri Jagannath | 22 | M | 43 | 60 | 60 | 120 | 90 | 14 | 62 | 60 | 60 | 120 | 111 | 13 | 77 |
| 29 | Sri Chandrakant | 14 | M | 17½ | 15 | 15 | 30 | 10¼ | 13 | 7½ | 26 | 26 | 52 | 10 | 17 | 7 |
| 30 | Sri Jamaludin | 12 | M | 17 | 28 | 28 | 56 | 20½ | 11 | 13 | 26 | 26 | 52 | 27 | 12 | 19 |
| 31 | Sri A. Rahim | 11 | M | 17½ | 30 | 30 | 60 | 22¼ | 10 | 15 | 26 | 26 | 52 | 29 | 11 | 20 |
| 32 | Sri A. Gani | 12 | M | 17 | 28 | 28 | 56 | 20½ | 11 | 13 | 26 | 26 | 52 | 27 | 12 | 19 |
| 33 | Shm. Lakshmibai Harachpura | 22 | F | 26 | 56 | 56 | 112 | 17 | 14 | 12 | 20 | 20 | 40 | 12 | 13 | 8 |
| 34 | Shm. Gorabai | 22 | F | 33 | 60 | 60 | 120 | 13 | 15 | 22 | 52 | 52 | 104 | 39 | 16 | 27 |
| 35 | Shm. Laltabai | 19 | F | 44 | 60 | 60 | 120 | 33 | 20 | 22 | 48 | 48 | 96 | 40 | 18 | 27½ |
| 36 | Shm. Sakdirgabai | 45 | F | 35 | 60 | 60 | 120 | 25½ | 14 | 17 | 52 | 52 | 104 | 26 | 15 | 17½ |
| 37 | Shm. Tarabai Chhoti | 20 | F | 30 | 60 | 60 | 120 | 39 | 25 | 27 | 32 | 32 | 64 | 22 | 12 | 15 |
| 38 | Shm. Basantibai | 40 | F | 34 | 56 | 56 | 112 | 12 | 11 | 8 | 52 | 52 | 104 | 20 | 13 | 13½ |
| 39 | Sri Sidiz | 18 | M | 29 | 48 | 48 | 96 | 20 | 10 | 13 | 40 | 40 | 80 | 34 | 14 | 22 |
| 40 | Shm. Jilabai | 30 | F | 15 | 32 | 32 | 64 | 11 | 12 | 7½ | .. | .. | .. | .. | .. | .. |
| 41 | Shm. Ayodhyabai | 25 | F | 37 | 60 | 60 | 120 | 38 | 15 | 26 | 60 | 60 | 120 | 53 | 15 | 36 |
| 42 | Shm. Narmadabai | 30 | F | 37 | 60 | 60 | 120 | 31 | 11 | 21 | 60 | 60 | 120 | 42 | 13 | 28½ |
| 43 | Shm. Shantabai. | 25 | F | 13 | 38 | 38 | 76 | 6 | 16 | 4 | .. | .. | .. | .. | .. | .. |
| 44 | Sri Bhanishanker | 22 | M | 34½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age Sex | | | | | | | | | | | | | |
| 45 | Shm. Puribai . . . | 30 F | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 46 | Sri Ishak Mohmad . . . | 20 M | 39½ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 47 | Shm. Latikbano . . . | 16 F | 3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Shm. Nannabai . . . | 35 F | 3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 49 | Shri Muhmad Yasin . . . | 18 M | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 50 | Shm. Kamrabai . . . | 55 F | 7 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 51 | Shm. Pushkarkhani . . . | .. | .. | .. | .. | .. | 29 | 12 | 21 | .. | .. | .. | 11 | 12 | 8 |
| | TOTAL . . . | | | | | | | | | | | 3296 | 1467 | | |

Name of Parishramalaya : Neemach (M.B.)

Date of starting 12-1-56.

Number of Charkha sets : 20

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March, 56 |  |  |  |  |  | From 28th March 56 to 13th April, 1956 |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Duration of work (hours) |  |  |  |  |  | Duration of work (hours) |  |  |  |  |  |
|  |  |  |  | Carding | Spg. | Total | Prodn. Hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  | Age Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Parvatib i | 45 F | 53 | 26¼ | 27¼ | 53½ | 20 | 14½ | .. | 39 | 46 | 85 | 34 | 16 | 6¼ |
| 2 | Gorabai | 35 F | 67 | 21½ | 76¾ | 98¼ | 35 | 12 | .. | 24 | 29 | 53 | 21 | 14 | 6¼ |
| 3 | Bhawani Shankar | 16 M | 73 | 39¾ | 62 | 101¾ | 29 | 13 | .. | 40 | 54 | 94 | 71 | 13½ | 6¼ |
| 4 | Machalabai | 16 F | 74 | 37½ | 56¾ | 94¼ | 39 | 15 | .. | 49 | 53 | 102 | 75 | 14¾ | .. |
| 5 | Kesarbai | 30 F | 73 | 36½ | 59¼ | 95½ | 60 | 13 | .. | 48 | 70 | 108 | 113 | 13½ | .. |
| 6 | To 10 Left | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 7 | Rameshwari Bai | 38 F | 75 | 33¾ | 49¾ | 84¼ | 31 | 16 | .. | 46½ | 57¼ | 103¾ | 78 | 17 | .. |
| 8 | Ganeshibai | 36 F | 76 | 43¼ | 65¼ | 108½ | 50 | 13½ | .. | 49 | 63½ | 112½ | 77 | 12¾ | .. |
| 9 | Sunderbai | 38 F | 76 | 83¾ | 57¼ | 101 | 41 | 12 | .. | 51 | 65½ | 116½ | 83 | 11¼ | .. |
| 10 | Anandibai | 25 F | 58 | 42¼ | 62½ | 104¾ | 60 | 14¾ | .. | 48 | 68½ | 116½ | 95 | 15¼ | .. |
| 11 | Sumitabai | 25 F | 66 | 29 | 70¼ | 99¼ | 70 | 15¼ | .. | 52 | 68½ | 115½ | 118 | 16 | .. |
| 12 | Kaushalayadevi | 30 F | 68 | 40¼ | 75¾ | 116 | 108 | 15¼ | .. | 52 | 66 | 118 | 165 | 15 | .. |
| 13 | Shivrati | 34 F | 66 | 27¼ | 69¾ | 97 | 70 | 15¼ | .. | 54 | 64 | 118 | 108 | 14½ | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age Sex | | | | | | | | | | | | | |
| 14 | Shanti Bai . . . . | 29 F | 55½ | 42¼ | 67¾ | 110 | 66 | 15½ | .. | 50½ | 65 | 115½ | 135 | 12½ | .. |
| | 23, left . . . . | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 15 | Mangilal . . . . | 21 M | 50 | 51 | 60¼ | 11¼ | 46 | 13¾ | .. | 102½ | 130½ | 233 | 198 | 14½ | .. |
| 16 | Shanti Bai . . . . | 18 F | 50 | 42¼ | 73½ | 115¾ | 59 | 13¼ | .. | Left | .. | .. | .. | .. | .. |
| 17 | Shankar Lal . . . . | 22 M | 16½ | 18¼ | 44¼ | 62½ | 22 | 14½ | .. | Left | .. | .. | .. | .. | .. |
| 18 | Inder Devi . . . . | 22 F | 15 | 9 | 25¾ | 34¾ | 14 | 12½ | .. | Left | .. | .. | .. | .. | .. |
| 19 | Ram Devi . . . . | 27 F | 33 | 12½ | 35½ | 46 | 16 | 12¼ | .. | 24½ | 35½ | 55 | 40 | 14 | .. |
| 20 | Usha Devi . . . . | 24 F | 31 | 25 | 35 | 60 | 21 | 11¼ | .. | 22 | 32 | 52 | 36 | 13 | .. |
| 21 | Sunder Bai . . . . | 16 F | 34½ | 14¼ | 25 | 39¼ | 19 | 13¼ | .. | 36¼ | 15¾ | 82 | 76 | 14½ | .. |
| 22 | Hem Lata Jain . . . | 23 F | 27½ | 13¾ | 19 | 31¾ | 17 | 11¾ | .. | 20 | 23 | 43 | 30 | 12 | .. |
| 23 | Karinayal Brahman . . . | 18 F | 17 | 11½ | 14¼ | 25¼ | 16 | 12¾ | .. | Left | Left | .. | .. | .. | .. |
| 24 | Dheeradevi Rajpur . . . | 50 F | 30½ | 18¼ | 20 | 38¼ | 19 | 12½ | .. | .. | .. | .. | .. | .. | .. |
| 25 | Kusm Devi . . . . | 26 F | 34 | 27 | 30 | 57 | 23 | 12¾ | .. | 45 | 59 | 104 | 77 | 12¼ | .. |
| 26 | Sudha Gawande . . . | 28 F | 35 | 26½ | 38 | 64¼ | 21 | 14 | .. | 30 | 37 | 67 | 35 | 14 | .. |
| 27 | Vidyadevi . . . . | 28 F | 22 | 12½ | 15 | 27½ | 10 | 12½ | .. | 8½ | 10 | 18½ | 6 | 13 | .. |
| 28 | Wanlata . . . . | 25 F | 15 | 10 | 12 | 22 | 10 | 12¼ | .. | Left | .. | .. | .. | .. | .. |
| 29 | Sunderbai . . . . | 35 F | 33 | 24½ | 37 | 61½ | 27 | 18 | .. | 39 | 52 | 91 | 76 | 13 | .. |
| 30 | Manormabai . . . . | 30 F | 31 | 23 | 30½ | 53¼ | 15 | 12¾ | .. | 24½ | 35½ | 60 | 18 | 11¾ | .. |
| 31 | Gutubai . . . . | 30 F | 20½ | 35 | 24½ | 59 | 27 | 11 | .. | 8 | 12 | 20 | 7 | 13 | .. |
| 32 | Biharishinh . . . . | 20 F | 26 | 18¾ | 20 | 38¾ | 15½ | 10½ | .. | 15 | 17½ | 32 | 6 | 13 | .. |
| 33 | Rampyaribai . . . . | 25 F | 24 | 12 | 20 | 32 | 13½ | 12½ | .. | 47½ | 55 | 102½ | ·73 | 14 | .. |
| 34 | Radhabai . . . . | 33 F | 5½ | 10 | 12 | 22 | 13 | 10¾ | .. | .. | .. | .. | .. | .. | .. |
| 35 | Sushilabai . . . . | 18 F | 21½ | 12 | 18 | 30 | 13 | 12½ | .. | 24 | 29 | 53 | 35 | 14 | .. |
| | TOTAL . . . | | | | | | | | | | | 2384 | 1896 | | |

Name of Parishramalaya : KHARGONE
Via Khandwa. Dist. (M.B.)

Date of starting 9-1-56.
Number of Charkha sets : 23

| S. No. | Name of operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | Venubai | 35 F | 69 | 30 | 42 | 72 | 30 | 12 | 24 | 16 | 19 | 35 | 11 | 11 | 3 |
| 2 | Vimlabai Rahibji | 25 F | 79 | 45 | 55 | 100 | 36 | 11 | 12 | 40 | 60 | 100 | 42 | 13 | 17 |
| 3 | Pushpabai | 17 F | 47 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 4 | Nalinibai | 18 F | 14 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 5 | Rampyaribai | 45 F | 75 | 40 | 60 | 100 | 55 | 16 | 13 | 30 | 40 | 70 | 44 | 20 | 16 |
| 6 | Kamlabai Tomar | 30 F | 26 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 7 | Shashikala | 17 F | 37 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 8 | Saraswatibai | 40 F | 75 | 35 | 35 | 70 | 23 | 12 | 22 | 30 | 30 | 60 | 22 | 13 | 21 |
| 9 | Shantibai Vyas | 32 F | 55 | 50 | 64 | 114 | 62 | 13 | 50 | 15 | 25 | 40 | 36 | 12 | 29 |
| 10 | Lakshmibai | 50 F | 64 | 40 | 44 | 84 | 42 | 13 | 20 | 6 | 9 | 15 | 10 | 15 | 4 |
| 11 | Krishnabai | 55 F | 73 | 40 | 50 | 90 | 24 | 10 | 13 | 35 | 45 | 80 | 34 | 14 | 10 |
| 12 | Kamla Gupta | 30 F | 55 | 30 | 32 | 62 | 31 | 13 | 10½ | 25 | 45 | 70 | 50 | 10 | 19 |
| 13 | Maltı Madho | 28 F | 58 | 35 | 65 | 100 | 55 | 11 | 48 | 35 | 65 | 100 | 51 | 14 | 28 |
| 14 | Sugrabai | 35 F | 49 | 50 | 54 | 104 | 46 | 14 | 10 | 30 | 40 | 70 | 34 | 16 | 6½ |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Age Sex | | | | | | | | | | | | | |
| 15 | Kesharbai . . . . | 40 F | 70 | 50 | 69 | 109 | 70 | 20 | 10 | 35 | 45 | 80 | 37 | 16 | 5 |
| 16 | Ansuyabai . . . . | 25 F | 43 | 50 | 69 | 109 | 58 | 14 | 15 | .. | .. | .. | .. | .. | .. |
| 17 | Mohanibai . . . . | 25 F | 32 | | | | | .. | .. | | .. | .. | .. | .. | .. |
| 18 | Hira Lal Yadav . . . . | 16 F | 60 | 40 | 40 | 80 | 45 | 14 | 10 | 40 | 40 | 80 | 48 | 14 | 10 |
| 19 | Anandibai . . . . | 50 F | 48 | .. | .. | .. | 12 | 12 | 3½ | .. | .. | .. | .. | .. | .. |
| 20 | Bhagirathbai . . . . | 18 F | 49 | 50 | 54 | 104 | 59 | 13 | 15 | 15 | 25 | 40 | 18 | 14 | 8½ |
| 21 | Subhadrabai . . . . | 18 F | 13 | .. | .. | .. | 16 | 15 | 5 | 5 | 65 | .. | 15 | .. | 3 |
| 22 | Ladubai . . . . | 50 F | 64 | .. | .. | .. | 15 | 15 | 5 | 25 | 35 | 60 | 15 | 14 | 5 |
| 23 | Rukmanibai . . . . | 50 F | 31 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 24 | Kesharbai Marud . . . | 50 F | 1 | | .. | | .. | . | .. | .. | .. | .. | .. | .. | .. |
| 25 | Ashabai . . . . | 45 F | 32 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 26 | Manchhibai . . . . | 14 F | 61 | 40 | 50 | 90 | 43 | 13 | 9 | 30 | 50 | 80 | 29 | 14 | 4 |
| 27 | Sitabai . . . . | 55 F | 6 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 28 | Parubai . . . . | 14 F | 56 | .. | .. | .. | 28 | 14 | 10 | 15 | 25 | 40 | 11 | 16 | 5 |
| 29 | Misarbai . . . . | 30 F | 60 | 50 | 54 | 104 | 56 | .. | 20 | 35 | 35 | 70 | 17 | 16 | 5 |
| 30 | Parvatibai . . . . | 40 F | 12 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 31 | Vimla Chopadekar . . . | 25 F | .. | .. | .. | .. | .. | .. | .. | 3 | 4 | 7 | 9 | 16 | 1 |
| 32 | Ansuyabai . . . . | 32 F | 61 | 33 | 45 | 78 | 39 | 14 | 17 | 35 , | 45 | 80 | 56 | 16 | 6 |
| 33 | Godavarioa . . . . | 25 F | .. | 50 | 54 | 104 | 60 | 15 | 18 | 40 | 60 | 100 | 120 | 16 | 3 |
| 34 | Radhabai . . . . | 45 F | 19 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 35 | Basanti . . . . | 17 F | 49 | .. | .. | .. | 21 | 15 | 9 | 10 | 12 | 22 | 109 | 13 | 4 |
| 36 | Jankibai . . . . | 40 F | 65 | .. | .. | .. | 27 | 10 | 30 | 60 | 60 | 120 | 37 | 10 | 35 |
| 37 | Gujraribai . . . . | 50 F | 56 | 40 | 44 | 84 | 35 | 13 | 18 | 25 | 35 | 60 | 40 | 13 | 22 |
| 38 | Prabhu Kamthe . . . | 12 F | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 39 | Bithal . . . . | 35 M | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 40 | Mansinh . . . . | 16 M | 55 | 38 | 40 | 78 | 39 | 13 | 28 | 44 | 50 | 94 | 23 | 16 | 14 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | Vinodchandra | 20 | M | 48 | 30 | 40 | 70 | 19 | 13 | 10 | .. | .. | .. | .. | .. | .. |
| 42 | Kamla Tamboli | 25 | F | 33 | 4 | 8 | 12 | 5 | 11 | 1 | 50 | 70 | 120 | 27 | 13 | 8 |
| 43 | Rukmanibai | 25 | F | 47 | 30 | 45 | 75 | 29 | 13 | 17 | 50 | 60 | 110 | 39 | 11 | 17 |
| 44 | Kamla Jatav | 20 | F | .. | 30 | 50 | 80 | 13 | 13 | 8 | .. | .. | .. | .. | .. | .. |
| 45 | Vinabai | 25 | F | .. | 30 | 35 | 65 | 27 | 12 | 10 | .. | .. | .. | .. | .. | .. |
| 46 | Narajanpandit | 25 | M | .. | 30 | 60 | 90 | 52 | 14 | 25 | .. | .. | .. | .. | .. | .. |
| 47 | Manoranjan | 16 | | 18 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| 48 | Vanshishwar | 21 | M | 34 | 30 | 36 | 66 | 15 | 13 | 4 | 20 | 26 | 46 | 14 | 15 | 5 |
| 49 | Jainabai | 15 | F | 36 | 42 | 50 | 92 | 32 | 14 | 15 | 25 | 35 | 60 | 28 | 14 | 10 |
| 50 | Ramlal Rathod | 23 | M | 39 | 30 | 48 | 78 | 17 | 15 | 5 | 35 | 45 | 80 | 28 | 15 | 10 |
| 51 | Shivram | 17 | M | 29 | 40 | 50 | 90 | 13 | 12 | 5 | 50 | 55 | 105 | 32 | 15 | 10 |
| 52 | Khasibai | 30 | F | 24 | 35 | 40 | 75 | 28 | 12 | 15 | .. | .. | .. | .. | .. | .. |
| 53 | Dongarshi | 16 | M | 24 | 50 | 54 | 104 | 4 | 12 | 10 | .. | .. | .. | .. | .. | .. |
| 54 | Ladki Verma | 14 | F | | | | | | | | | | | | | |
| 55 | Nathu Singh Verma | 17 | M | 35 | 40 | 64 | 104 | 45 | 9 | 9 | .. | .. | .. | .. | .. | .. |
| 56 | Ladki Savant | 15 | F | 24 | 50 | 50 | 100 | 13 | 13 | 4 | .. | .. | .. | .. | .. | .. |
| 57 | Anar Savald | 18 | F | 24 | 50 | 50 | 100 | 8 | 14 | 5 | .. | .. | .. | .. | .. | .. |
| | TOTAL | | | | | | | | | | | | 2,234 | 9,097 | | |

ame of Parishramalya : Meenchenta, Kozhikode (Kerala)

Date of starting : 1-1-56
Number of Charkha sets: 17

| S. No. | Name of Operative | Class of Spinner | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Duration of work (hours) | | | | | | Duration of work (hours) | | | | | |
| | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age Sex | | | | | | | | | | | | | |
| 1 | V. Unniatha | 32 M | 88 | 60 | 60 | 120 | 70 | 16 | 5 | 60 | 60 | 120 | 68 | 14 | 3 |
| 2 | V. Kuttimallu | 27 M | 82 | 56 | 56 | 112 | 59 | 15 | 5 | 56 | 56 | 112 | 60 | 16 | 1 |
| 3 | Pachan Laxmi | 26 F | 85 | 50 | 70 | 120 | 48 | 17 | 7 | 80 | 32 | 112 | 47 | 12 | 3 |
| 4 | P. V. Laxmi | 24 F | 83½ | 50 | 62 | 112 | 55 | 17 | 3½ | 52 | 60 | 112 | 58 | 18 | 3 |
| 5 | V. V. Mahadevi | 37 F | 83 | 60 | 60 | 120 | 34 | 15 | 2 | 60 | 60 | 120 | 50 | 13 | 4 |
| 6 | M. V. Theikutty | 41 | 80 | 50 | 58 | 108 | 43 | 15 | 2½ | 60 | 60 | 120 | 57 | 15 | 1 |
| 7 | P. Mahadevi | 35 | 82 | 55 | 65 | 120 | 56 | 14 | 3½ | 50 | 70 | 120 | 62 | 15 | ½ |
| 8 | P. Kalyani | 26 | 79 | 50 | 58 | 108 | 45 | 14 | 4 | 50 | 52 | 102 | 82 | 14 | ½ |
| 9 | C. V. Ammu | 22 | Left | after working 16 days. | | | | | | | | | | | |
| 10 | K. V. Janaki | 16 F | 86½ | 55 | 65 | 120 | 54 | 16 | 2½ | 46 | 70 | 116 | 52 | 13 | 2 |
| 11 | E. V. Chinnamu | 15 | 83 | 52 | 60 | 112 | 48 | 16 | 3 | 60 | 52 | 112 | 50 | 14 | 3½ |
| 12 | M. Devi | 24 F | Left | after working for a week. | | | | | | | | | | | |
| 13 | C. Devaki | 16 F | 83½ | 52 | 60 | 112 | 33 | 13 | 6½ | 60 | 60 | 120 | 44 | 15 | 8½ |
| 14 | C. V. Janaki | 20 F | 76½ | 60 | 56 | 116 | 43 | 19 | 5 | 60 | 60 | 120 | 52 | 18 | 1½ |
| 15 | M. V. Parmeshwaram | 17 M | Left | after 16 February. | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | P. V. Devki | 15 F | 85½ | 60 | 60 | 120 | 58 | 15 | 4 | 60 | 52 | 112 | 56 | 16 | 4 |
| 17 | M. V. Madhavi | 24 F | Left | after 21 January. | | | | | | | | | | | |
| 18 | V. V. Malu | 25 | 84 | 60 | 60 | 120 | 59 | 17 | 8 | 50 | 54 | 104 | 43 | 18 | 3 |
| 19 | K. V. Narayani | 27 F | 85½ | 60 | 60 | 120 | 94 | 16 | 3½ | 60 | 52 | 112 | 84 | 16 | 4½ |
| 20 | M. V. Janaki | 22 F | 83 | 50 | 58 | 108 | 52 | 16 | 5 | 60 | 60 | 120 | 13 | 13 | 5½ |
| 21 | P. Kalyani | 22 F | 51 | 44 | 44 | 88 | 34 | 15 | 6 | 46 | 50 | 96 | 55 | 13 | 5 |
| 22 | B. Karthiayani | 24 | Left on 5th March | | | | | | | | | | | | |
| 23 | C. Thankammu | 16 | 53 | 54 | 50 | 104 | 45 | 15 | 5 | 60 | 52 | 112 | 45 | 13 | 5 |
| 24 | K. Kathiessa | 14 | 59 | 58 | 50 | 108 | 34 | 15 | 3½ | 60 | 60 | 120 | 35 | 13 | 2½ |
| 25 | C. P. Leela | 17 F | 31½ | 40 | 48 | 88 | 13 | 13 | 14 | 70 | 50 | 120 | 20 | 13 | 7 |
| 26 | K. P. Bhargavi | 42 F | 41 | 80 | 40 | 120 | 14 | 12 | 20½ | 60 | 60 | 120 | 24 | 13 | 10 |
| 27 | Kamalashi | 15 F | 41 | 80 | 40 | 120 | 20 | 13 | ½ | 80 | 40 | 120 | 21 | 15 | 11 |
| 28 | P. N. Laxmi | 16 F | 36 | 80 | 32 | 112 | 20 | 13 | 3½ | 44 | 44 | 88 | 21 | 13 | 2½ |
| 29 | K. C. Sharda | 21 F | 37½ | 80 | 32 | 112 | 46 | 16 | 7 | 60 | 60 | 120 | 62 | 13 | 2½ |
| 30 | K. V. Devi | 20 F | 35½ | 80 | 24 | 104 | 19 | 15 | 8 | 80 | 24 | 104 | 28 | 16 | 8 |
| 31 | K. V. Janaki | 28 F | 39 | 60 | 60 | 120 | 48 | 16 | 12 | 60 | 60 | 120 | 59 | 13 | 7 |
| 32 | T. K. Narayani | 19 F | 39 | 80 | 40 | 120 | 22 | 13 | 34½ | 60 | 60 | 120 | 43 | 15 | 11 |
| 33 | K. Janu | 28 | 36½ | 60 | 52 | 112 | 23 | 15 | 15 | 60 | 52 | 112 | 32 | 13 | 17½ |
| 34 | N. Shrimathi | 15 F | 39 | 60 | 60 | 120 | 16 | 15 | 55 | 60 | 60 | 120 | 30 | 15 | 23 |
| 35 | K. V. Rohini | 19 F | 38½ | 60 | 52 | 112 | 33 | 16 | 29 | 70 | 50 | 120 | 48 | 15 | 11 |
| 36 | K. V. Devyani | 16 F | 37½ | 80 | 24 | 104 | 18 | 15 | 6½ | 60 | 60 | 120 | 33 | 14 | 3 |
| 37 | P. Devi | 23 F | 35½ | 60 | 52 | 112 | 25 | 15 | 22½ | 60 | 60 | 120 | 39 | 13 | 12½ |
| 38 | K. Kaushalya | 22 F | 27 | 70 | 50 | 120 | 20 | 16 | 4 | 20 | 20 | 40 | 11 | 13 | 3 |
| 39 | P. G. Ratanbai | 21 F | 38 | 60 | 48 | 108 | 14 | 15 | 33½ | 60 | 60 | 120 | 25 | 16 | 16 |
| 40 | K. P. Janu | 18 F | 38½ | 70 | 50 | 120 | 22 | 13 | 19½ | 60 | 60 | 120 | 29 | 15 | 11½ |
| 41 | U. Saraswathi | 14 F | 35½ | 60 | 44 | 104 | 18 | 13 | 13½ | 54 | 50 | 104 | 22 | 14 | 5 |
| 42 | V. Janaki | 28 F | 37 | 70 | 50 | 120 | 20 | 15 | 36 | 60 | 60 | 120 | 43 | 16 | 7 |
| | TOTAL | | | | | | | | | | | 4170 | 1653 | | |

Name of Parishramalaya: ELAPULLI (PALGHAT-KERALA) Date of starting 1-1-1956; Number of Charkha sets: 18

| S.No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 1956 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | P. Yashoda | 18 | F | 87½ | 52 | 60 | 112 | 59 | 20 | 7½ | 70 | 50 | 120 | 67 | 20 | 15 |
| 2 | K. Kathyayani | 16 | F | 88½ | 60 | 60 | 120 | 70 | 18 | 11 | 65 | 55 | 120 | 62 | 18 | 17 |
| 3 | P. Thangmani | 19 | F | 88 | 64 | 56 | 120 | 60 | 16 | 10 | 54 | 50 | 104 | 55 | 16 | 8 |
| 4 | K. Vellakutty | 25 | F | 88½ | 66 | 54 | 120 | 66 | 18 | 13½ | 52 | 60 | 112 | 54 | 18 | 13½ |
| 5 | M. Komalam | 16 | F | 84½ | 68 | 52 | 120 | 54 | 18 | 13 | 54 | 58 | 112 | 48 | 18 | 15 |
| 6 | K. Janaki | 21 | F | 89½ | 60 | 60 | 120 | 85 | 18 | 12½ | 55 | 65 | 120 | 86 | 18 | 13 |
| 7 | N. Nagmal | 19 | M | 88 | 54 | 66 | 120 | 83 | 18 | 12½ | 60 | 60 | 120 | 78 | 18 | 20½ |
| 8 | P. Kunti Laxmi | 18 | F | 79½ | 60 | 62 | 112 | 46 | 16 | 4 | 70 | 50 | 120 | 52 | 16 | 12½ |
| 9 | M. Janaki | 17 | F | 85½ | 60 | 60 | 120 | 67 | 19 | 13½ | 54 | 66 | 120 | 64 | 19 | 20 |
| 10 | T. Manikyavalli | 24 | F | 79½ | 54 | 66 | 120 | 67 | 16 | 13½ | 54 | 66 | 120 | 64 | 19 | 20 |
| 11 | O. Saraswati | 18 | F | 81 | 68 | 52 | 120 | 72 | 16 | 15½ | 56 | 64 | 120 | 62 | 16 | 17 |
| 12 | P. Shreemavati | 22 | F | 63½ | 52 | 68 | 120 | 82 | 18 | 10 | 60 | 60 | 120 | 90 | 18 | 20 |
| 13 | K.V. Rajamal | 15 | F | 63 | 56 | 64 | 120 | 44 | 20 | 31 | 65 | 55 | 120 | 38 | 20 | 12 |
| 14 | K.V. Padmavati | 18 | F | 63 | 64 | 56 | 120 | 55 | 18 | 4 | 52 | 50 | 112 | 48 | 18 | 4½ |
| 15 | V. Panchali | 35 | F | 62 | 47 | 73 | 120 | 61 | 18 | 6 | 50 | 46 | 96 | 56 | 18 | 15 |
| 16 | V. Veshya | 20 | F | 65 | 53 | 67 | 120 | 72 | 19 | 14 | 55 | 65 | 120 | 77 | 19 | 15 |
| 17 | M. Devki Amma | 36 | F | 64 | 65 | 55 | 120 | 47 | 16 | 9 | 64 | 56 | 120 | 61 | 16 | 15 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | T. Somlam . . . . | 15 | F | 62½ | 56 | 60 | 116 | 51 | 18 | 23½ | 54 | 66 | 120 | 73 | 18 | 10 |
| 19 | Sonsunderam . . . . | 19 | F | 56 | 50 | 54 | 104 | 46 | 18 | 11 | 50 | 52 | 102 | 66 | 17 | 3 |
| 20 | K.V. Pushpavalli . . . | 15 | F | 60 | 60 | 60 | 120 | 42 | 16 | 17 | 60 | 52 | 112 | 38 | 16 | 11½ |
| 21 | K. Maratha . . . . | 13 | F | 59 | 62 | 58 | 120 | 53 | 16 | 4½ | 65 | 55 | 120 | 65 | 16 | 10 |
| 22 | C. Bhargavi . . . . | 15 | F | 58 | 64 | 56 | 120 | 54 | 15 | 23 | 52 | 60 | 112 | 35 | 15 | 10 |
| 23 | K. Vishalaxi . . . . | 18 | F | 58½ | 58 | 62 | 120 | 50 | 15 | 12 | 60 | 60 | 120 | 59 | 16 | 4 |
| 24 | A. Vishlaxi . . . . | 15 | F | 55½ | 60 | 52 | 112 | 38 | 16 | 10 | 70 | 50 | 120 | 57 | 16 | 10 |
| 25 | M. Sarojini . . . . | 15 | F | 57 | 52 | 56 | 108 | 39 | 15 | 5 | 65 | 55 | 120 | 46 | 15 | 14 |
| 26 | T. Laxmi . . . . | 17 | F | 50½ | 60 | 60 | 120 | 25 | 16 | 11 | 54 | 66 | 120 | 35 | 16 | 16½ |
| 27 | P. Saraswathi . . . . | 17 | F | 46½ | 55 | 65 | 120 | 44 | 17 | 5 | 50 | 58 | 108 | 37 | 17 | 13½ |
| 28 | K. Vellakuthy . . . . | 22 | F | 40 | 52 | 60 | 112 | 56 | 18 | 15 | 40 | 58 | 88 | 45 | 18 | 10 |
| 29 | U. Radha . . . . | 15 | F | 45 | 66 | 52 | 120 | 36 | 16 | 8 | 60 | 60 | 120 | 33 | 16 | 6½ |
| 30 | C. Rugmini . . . . | 17 | F | 44 | 57 | 63 | 120 | 52 | 17 | 8½ | 52 | 60 | 112 | 51 | 17 | 15 |
|  | TOTAL . |  |  |  |  |  |  |  |  |  |  |  | 3450 | 1703 |  |  |

Name of Parishramalaya: MUDAPLOOLLOOR VIA PALGHAT (KERALA)

Date of starting 22-1-56
Number of Charkha sets: 12.

| S.No. | Name of operative. | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of works (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas | Carding | Spg. | Total | Prodn. hanks | Count | Loss Tolas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | A. Surilla | 15 | F | 72 | 58½ | 61½ | 120 | 76 | 14 | 57½ | 57 | 63 | 120 | 74 | 13 | 21 |
| 2 | P. Sathin Bhamn | 16 | F | 69 | 52 | 52 | 104 | 66 | 15 | 35 | 59 | 61 | 120 | 71 | 13 | 36 |
| 3 | P.R. Vuni | 25 | F | 71 | 87 | 33 | 120 | 123 | 17 | 10 | 54 | 62 | 116 | 99 | 15 | 26 |
| 4 | P.V. Kamalani | 21 | F | 71 | 56 | 56 | 112 | 101 | 17 | 27½ | 62 | 58 | 120 | 90 | 14 | 28 |
| 5 | P. Somasundari | 16 | F | 66 | 60 | 60 | 120 | 56 | 16 | 47 | 60 | 60 | 120 | 65 | 14 | 22 |
| 6 | P. Subhadra | 14 | F | Left | | | | | | | | | | | | |
| 7 | K. Kullanikuty | 22 | F | 68½ | 64 | 56 | 120 | 66 | 16 | 17 | 51 | 57 | 108 | 56 | 14 | 10 |
| 8 | K. Damayanthi | 21 | F | Left | | | | | | | | | | | | |
| 9 | N. Vijaya (Jayadevi) | 22 | F | 72 | 64 | 56 | 120 | 65 | 13 | 10 | 65 | 55 | 120 | 62 | 15 | 39 |
| 10 | N. Padamalochria | 18 | F | Left | | | | | | | | | | | | |
| 11 | P. V. Radha | 19 | F | 64½ | 60 | 52 | 112 | 55 | 14 | 69 | 58 | 58 | 116 | 78 | 13 | 24 |
| 12 | E. Sathyabhama | 24 | F | 65½ | 65 | 64 | 120 | 93 | 16 | 20 | 50 | 66 | 116 | 90 | 15 | 8 |
| 13 | N. Minakshikutty | 16 | F | 67½ | 52 | 60 | 112 | 68 | 16 | 15 | 44 | 40 | 84 | 67 | 15 | 11 |
| 14 | K. Parvathi | 25 | F | 65 | 60 | 60 | 120 | 94 | 16 | 10 | 52 | 60 | 112 | 97 | 13 | 7 |
| 15 | T. Padmavathi | 16 | F | 66 | 60 | 60 | 120 | 72 | 13 | 15 | 60 | 60 | 120 | 70 | 13 | 14 |
| 16 | C. Vinu | 28 | F | 66 | 64 | 56 | 120 | 45 | 15 | 37 | 56 | 64 | 120 | 48 | 14 | 19 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | N. Tatha . . . . . | 24 |  | 63½ | 60 | 60 | 120 | 55 | 14 | 35 | 51 | 57 | 108 | 60 | 13 | 11 |
| 18 | P. Saraswathi . . . . . | 24 | F | 65 | 64 | 56 | 120 | 89 | 16 | 41 | 60 | 56 | 116 | 70 | 13 | 28 |
| 19 | K. Sarojani . . . . . | 16 | F | .. | 26 | 22 | 48 | 5 | 13 | 22 | Left |  |  |  |  |  |
| 20 | K. Subhadra . . . . . | 22 |  | Left |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | C. Parukutti . . . . . | 30 | F | 62 | 68 | 52 | 120 | 58 | 13 | 10 | 54 | 66 | 120 | 54 | 12 | 17 |
| 22 | K. Kochamala . . . . . | 22 | F | Left |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | P. Laxmicutti . . . . . | 16 | F | Left |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | K. Ammujakshi . . . . | 16 | F | 44 | 32 | 32 | 64 | 32 | 13 | 31 | 15 | 16 | 32 | 16 | 15 | 18 |
| 25 | N. Sathyabhama . . . . | 16 | F | 65 | 60 | 60 | 120 | 74 | 13 | 57 | 52 | 60 | 112 | 64 | 16 | 44 |
| 26 | P. Padmavathi . . . . | 16 | F | 57½ | 60 | 60 | 120 | 49 | 13 | 31 | 51 | 57 | 108 | 50 | 15 | 27 |
| 27 | K. Madhavi . . . . . | 28 | F | 41 | 57 | 55 | 112 | 68 | 13 | 25 | 24 | 24 | 48 | 28 | 16 | 14 |
| 28 | & 29. P. Kamalabai & P. Seetha Admitted on 23-2-56 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | & 31. R. Parvathi & V.A. Seethlaxmi admitted on 23-2-56 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32 | P.K. Sarojini. . . . . . | 15 | F | 40 | 60 | 60 | 120 | 46 | 16 | 37 | 59 | 61 | 120 | 66 | 14 | 32 |
|  | TOTAL . |  |  |  |  |  |  |  |  |  |  |  | 2256 | 1375 |  |  |

Name of Parishramlaya: Suchinderm Nagar Coil Vibhag Number of Charkha sets: 19. Date of starting 11-1

| S.No. | Name of operative | Class of Spinner | | No. of days of Trg. | From 10th March 56 to 27th March 56 | | | | | | From 28th March 56 to 13th April 56. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Duration of work (Hours) | | | | | | Duration of work (Hours) | | | | | |
| | | | | | Card-ing | Spg. | Total | Prodn. banks | Count | Loss Tolas | Card-ing | Spg. | Total | Prodn. banks | Count | Loss Tclas |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Age | Sex | | | | | | | | | | | | | |
| 1 | P. Kaveri | 30 | F | 37 | 56 | 56 | 112 | 14 | 10 | 20 | 60 | 60 | 120 | 30 | 10 | 25 |
| 2 | P. Pappathy | 16 | F | 36 | 52 | 52 | 104 | 11 | 8 | 15 | 60 | 60 | 120 | 24 | 10 | 25 |
| 3 | L. Saradha | 18 | F | 37 | 56 | 56 | 112 | 9 | 8 | 10 | 60 | 60 | 120 | 17 | 8 | 15 |
| 4 | D. Sarojam | 17 | F | 37 | 56 | 56 | 112 | 9 | 8 | 10 | 60 | 60 | 120 | 18 | 10 | 20 |
| 5 | B. Sivagnanam | 15 | F | 36 | 56 | 56 | 112 | 13 | 8 | 20 | 56 | 56 | 112 | 15 | 10 | 15 |
| 6 | S. Kolammal | 15 | F | 32 | 48 | 48 | 96 | 10 | 13 | 15 | 46 | 48 | 96 | 14 | 10 | 10 |
| 7 | V. Bharadham] | 19 | F | 37 | 60 | 60 | 120 | 21 | 21 | 25 | 56 | 56 | 112 | 35 | 11 | 30 |
| 8 | R. Valliammni | 16 | F | 38 | 60 | 60 | 120 | 14 | 12 | 20 | 60 | 60 | 120 | 22 | 12 | 20 |
| 9 | B. Gomathi | 17 | F | 38 | 60 | 60 | 120 | 21 | 13 | 30 | 60 | 60 | 120 | 36 | 10 | 35 |
| 10 | K. Muthammal ] | 16 | F | 38 | 60 | 60 | 120 | 21 | 13 | 30 | 60 | 60 | 120 | 38 | 10 | 35 |
| 11 | C. Buthulakshmi | 18 | F | 38 | 60 | 60 | 120 | 19 | 10 | 30 | 60 | 60 | 120 | 35 | 8 | 30 |
| 12 | K. Rajam | 20 | F | 38 | 60 | 60 | 120 | 20 | 10 | 30 | 60 | 60 | 120 | 34 | 8 | 30 |
| 13 | M. Sangari | 19 | F | 38 | 60 | 60 | 120 | 27 | 14 | 35 | 60 | 60 | 120 | 41 | 14 | 40 |
| 14 | B. Rajam | 19 | F | 33 | 60 | 60 | 120 | 28 | 14 | 35 | 40 | 40 | 80 | 25 | 14 | 20 |
| 15 | A. Shanmugham | 17 | M | 36 | 52 | 52 | 104 | 20 | 15 | 20 | 60 | 60 | 120 | 24 | 16 | 20 |
| 16 | L. Rajamal | 30 | F | 38 | 60 | 60 | 120 | 16 | 18 | 25 | 60 | 60 | 120 | 41 | 18 | 35 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | S. Thanammi | 19 | F | 38 | 60 | 60 | 120 | 14 | 12 | 30 | 60 | 60 | 29 | 29 | 12 | 25 |
| 18 | S. Gomathy | 32 | F | 38 | 60 | 60 | 120 | 14 | 12 | 20 | 60 | 60 | 120 | 29 | 12 | 25 |
| 19 | M.S. Danammai | 20 | F | 36 | 52 | 52 | 104 | 9 | 10 | 15 | 60 | 60 | 120 | 16 | 8 | 15 |
| 20 | Isakkiammai | 35 | F | 37 | 60 | 60 | 120 | 9 | 10 | 15 | 56 | 56 | 112 | 11 | 8 | 10 |
| 21 | M. Shanmugham Pillai | 22 | M | 36 | 52 | 52 | 104 | 21 | 13 | 30 | 60 | 60 | 120 | 33 | 13 | 30 |
| 22 | S. Velapan | 18 | M | 38 | 60 | 60 | 120 | 24 | 13 | 30 | 60 | 60 | 120 | 35 | 13 | 30 |
| 23 | S. Narayana Pillai | 21 | M | 38 | 60 | 60 | 120 | 19 | 13 | 30 | 60 | 60 | 120 | 36 | 13 | 28 |
| 24 | S. Ramakrishnan | 22 | M | 34 | 56 | 56 | 112 | 15 | 10 | 15 | 48 | 48 | 96 | 21 | 10 | 15 |
| 25 | B. Suryahrayana Pillai | 28 | M | 35 | 52 | 52 | 104 | 9 | 10 | 10 | 56 | 56 | 112 | 28 | 10 | 10 |
| 26 | C.C. Thanu Pillai | 28 | M | 35 | 52 | 52 | 104 | 9 | 10 | 10 | 56 | 56 | 112 | 28 | 10 | 20 |
| 27 | N. Madusuthanam | 19 | M | 38 | 60 | 60 | 120 | 25 | 13 | 26 | 60 | 60 | 120 | 28 | 14 | 10 |
| 28 | H. Narayana Pillai | 38 | M | 37 | 56 | 56 | 112 | 13 | 10 | 15 | 60 | 60 | 120 | 35 | 10 | 25 |
| 29 | N. Ammuga Perumal | 23 | M | 38 | 60 | 60 | 120 | 19 | 14 | 20 | 60 | 60 | 120 | 27 | 11 | 20 |
| 30 | S. Gangadhara Pillai | 18 | M | 37 | 56 | 56 | 112 | 18 | 10 | 15 | 60 | 60 | 120 | 28 | 8 | 20 |
| 31 | C. Pernnammai | 16 | F | 38 | 60 | 60 | 120 | 11 | 10 | 15 | 60 | 60 | 120 | 8 | 26 | 20 |
| 32 | S. Isakkiammai | 16 | F | 37 | 60 | 60 | 120 | 11 | 10 | 25 | 60 | 60 | 120 | 28 | 8 | 20 |
| 33 | P. Neelammai | 15 | F | 37 | 56 | 56 | 112 | 13 | 8 | 15 | 60 | 60 | 120 | 28 | 10 | 20 |
| 34 | S. Paradesi | 30 | M | 38 | 60 | 60 | 120 | 13 | 8 | 15 | 60 | 60 | 120 | 34 | 10 | 25 |
| 35 | P. Cellammai | 26 | F | 38 | 63 | 60 | 120 | 16 | 10 | 20 | 60 | 60 | 120 | 32 | 12 | 35 |
| 36 | M. Selvabhai | 25 | F | 38 | 60 | 60 | 120 | 17 | 10 | 20 | 60 | 60 | 120 | 32 | 12 | 25 |
| 37 | V. V. Jajalakshmi | 17 | F | 32 | 56 | 56 | 112 | 5 | 8 | 10 | 40 | 40 | 80 | 6 | 10 | 5 |
| 38 | V. Subbammai | 16 | F | 36 | 52 | 52 | 104 | 3 | 8 | 5 | 60 | 60 | 120 | 15 | 10 | 10 |
| 39 | P. Divana Pillai | 15 | M | 38 | 60 | 60 | 120 | 6 | 8 | 10 | 60 | 60 | 120 | 16 | 8 | 10 |
| 40 | V. Azhakammai | 16 | F | 34 | 60 | 60 | 120 | 6 | 8 | 10 | 44 | 44 | 88 | 12 | 8 | 15 |
| | TOTAL | | | | | | | | | | | | 4600 | 1045 | | |

सत्यमेव जयते

# APPENDIX XI

## Report on sampling of performance data in the parishramalayas at Meerut. This sampling was arranged by the Committee.

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# APPENDIX XI

## REPORT ON SAMPLING OF PERFORMANCE DATA IN THE PARISHRAMALAYA AT MEERUT. THIS SAMPLING WAS ARRANGED BY THE COMMITTEE.

*Report of the Principal, Government Central Textile Institute, Kanpur, regarding the observations made at Ambar Charkha Training Class, Meerut, under Shri Gandhi Ashram, Meerut.*

On 11th of May 1956, Shrimati P. Johari, Dy. Secretary, Ministry of Production and the Secretary of Ambar Charkha Committee, asked that observations may be recorded at the *Parishramalaya*, Meerut, where training in Ambar Charkha is going on under Shri Gandhi Ashram, Meerut. Accordingly I visited Meerut on the 12th and discussed with the authorities of the Ashram the procedure for allowing facilities for proper record of the observations at the class.

The class under reference was meant to impart a sort of general training to the persons who had been selected by the Ashram from Ambar Charkha class and whom the Ashram proposed to employ in various capacities in the khadi organizations. The Ashram authorities, therefore, pointed out that the trainees were at present working on Ambar Charkha and would require some time to gain speed and to set right the Ambar Charkha for operation. 13th being Sunday it was decided that the preparatory operations may start from Monday the 14th. May 14, 15 and 16, were allowed to the trainees to complete the preliminary work. Under the circumstances the observations could be made only on the 17th and 18th and the results were compiled at Kanpur on the 19th.

Comparison of the data collected on the 17th and 18th will show that better performance was given on the 18th and if observations were to be continued for a week or so, still better results would have been attained.

The observations were compiled for ten trainees and in four hours working the number of hanks works out from 7 to 9·2, as detailed below:

| Sl. No. | Name of the Trainee | Counts of Yarn | Production per 4 hours in hanks |
|---|---|---|---|
| 1 | Sri Ved Prakash . . . | 24's | 7½ |
| 2 | Sri Chedda Lal . . . | 24½'s | 7¼ |
| 3 | Sri Kishori Lal . . . | 18½'s | 8·8 |
| 4 | Sri Mahendra . . . . | 22's | 7·0 |
| 5 | Sri Raj Kumar . . . | 21's | 9·2 |
| 6 | Sri Uma Shankar . . . | 27's | 8·0 |
| 7 | Sri Narendra . . . . | 20's | 8¼ |
| 8 | Sri Chandra Kishore . . . | 21's | 8·0 |
| 9 | Sri Betabji . . . . | 19's | 7·2 |
| 10 | Sri Sri Gopal . . . . | 20's | 7½ |

These figures give an idea of the speed in case of the counts that the scheme of the Board envisages to be spun at Ambar charkha.

Since *Dhunai Mudia* were not in order, the Ashram supplied cotton carded by paddle carding machine. Therefore, no observations could be recorded regarding the work of *Dhunai Mudia.*

The preparatory operation of making rovings for spinning was done as under: —

No. of drawing operation, 1/4/4/3.
No. of roving operation, 1/3/3.

It will be appreciated that the time being very short more detailed observations were not possible.

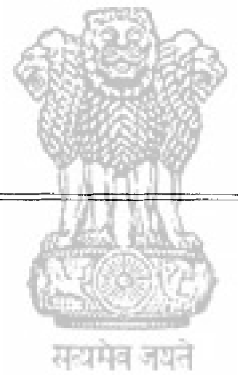
(Sd.) J. N. SINGH,
*Principal,*
Govt Central Textile Institute,
Kanpur.

*Duted May* 19, 1956.

सत्यमेव जयते

# APPENDIX XII

## Miscellaneous



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# APPENDIX XII

## *Miscellaneous*

### I

NO. A.C.C./56

Government of India
MINISTRY OF PRODUCTION

*New Delhi, the* 10*th May* 1956

To
The Chairman,
All India Khadi and Village Industries Board,
Post Box No. 482.
Bombay—1.

Dear Sir,

At its last meeting in Puttur (Andhra State) on 8th May, 1956, the Ambar Charkha Committee decided to request the Board to furnish replies to the following questions:—

(i) Does the Board's Ambar Charkha scheme envisage the continuation of subsidy after 1960-61? If so, on what assumptions? Is it contemplated that the subsidy would eventually be eliminated?

(ii) Is the Ambar Charkha Programme of the Board to be a scheme for supplying 15 million yards of cloth, to meet the extended requirements of cloth in the Second Five Year Plan or is the scheme to be implemented as an integral part of the development of the village economy as a whole? Is it to be correlated to the schemes of development of other village industries and agriculture?

(iii) To what extent can the Ambar Charkha Programme be incorporated in the scheme of self-sufficiency of each village or a group of villages? Would it be feasible to eliminate competition between mill-made and Ambar cloth in the self-sufficiency scheme?

I would be grateful, if replies to the above questions are furnished at your earliest convenience but not later than the 16th of this month. I am sorry for the inconvenience that this short notice may cause to your organisation. But, since the Committee is anxious to submit its report by the 25th of this month, it will be greatly appreciated if you would kindly furnish the information in time.

Yours faithfully,
(Sd.) Mrs. P. Johari,
Secy. Ambar Charkha Committee.

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GOVERNMENT OF INDIA
MINISTRY OF PRODUCTION
ALL INDIA KHADI AND VILLAGE INDUSTRIES BOARD

101, Queens Road, Bombay—1.
Date: 17th May, 1956.

NO. ECR/AC/56

Dear Smt. Johari,

SUB.—Certain information asked for by the Ambar Charkha Committee

Will you kindly refer to your circular letter No. A.C.C./56, dated the 10th May, 1956 addressed to the Chairman of the All India Khadi and Village Industries Board asking for replies to certain questions connected with the Board's Ambar Charkha Scheme. I am to furnish below the replies to the three questions posed therein:—

Question (1).—It is too early to say whether or not the need for subsidy will continue after 1960-61. It may, however, be indicated that the rate of the subsidy that may be needed after 1960-61 may probably be smaller than during the Second Plan period, as the improvement of the implements now being investigated may improve their efficiency and raise their respective productivity. While the Board desires the elimination of the subsidy at some future date, it is in no position today to indicate when it will be able to do so. As far as the Second Five-Year Plan period is concerned, there will be need for the payment of a subsidy.

Question (2).—The Ambar Charkha Programme of the Board has already been delayed by several months, and the Board is, therefore, in no position to implement its first-year programme. In other words, with only four effective years of the Plan period left to implement its programme, if it is sanctioned in all its parts and in time, the Board may be able to produce about 1000 million yards of cloth by 1960-61. Manufacture of 1500 million yards through Ambar yarn woven on handlooms and the attempt to improve the economic conditions in the villages or their economic status are not two distinct programmes, but a common programme with a common purpose. The main approach of the Board's programme is that the Ambar Charkha can help to raise the economic status of the villages through diversifying production and employment in the rural areas. Consequently, it will form a part of its other programmes as well, and wherever possible will be coordinated with them.

Question (3).—Ambar Charkha is an ideal implement to promote self-sufficiency in cloth; but how far the scheme for self-sufficiency in cloth can be successful depends very largely on the continuation of the subsidy now being paid. The Board takes the view, judging by the experience of the last year's outlay on *vastraswavalamban,* that not less than 25 per cent. of the output of cloth is likely to be consumed by the spinners, weavers and their respective families. The Board is of the opinion that a self-sufficiency scheme implies absence of the competition and consequently, the question of eliminating competition with mill-made cloth in a self-sufficiency scheme does not arise.

Yours sincerely,

(Sd.) P. S. Vaidyanathan,

To

Mrs. P. Johari,
Deputy Secretary to the Govt. of India,
Ministry of Production,
Thapar House, Janpath,
New Delhi.

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## II

## A.T.I.R.A. REPORT

## TEST REPORT ON THE SUNDAR MODEL OF AMBAR CHARKHA

### Introduction

The most important improvement introduced in the Sundar Model of the Ambar Charkha is the provision of about 13 ball bearings made at a very low cost, in place of the wooden or metal bushings used in the regular model. Other diffierences are provision of metal reels for rovings fed to the Charkha and the use of oil bolsters for spindles. On account of the use of ball bearings the Charkha runs much lighter in comparison to the original Ambar Model. Such a modified Sundar Model was received at A.T.I.R.A. towards the middle of April from the Ambar Charkha Samiti for testing its performance in the light of the quality and quantity of yarn spun on it. The worker who was also provided by the Samiti, was directed in the beginning to carry out the preliminary qualitative spinning experiments with the rovings of *Vijay* cotton (Ag. mark) carded as well as combed, made at the pilot spinning mill of A.T.I.R.A. During the later production tests rovings were made by the same worker from the *Vijay* bale cotton on a *Belani* machine and yarns were spun on the Sundar as well as on one of the normal Ambar charkhas available at A.T.I.R.A. This report thus, deals both with the preliminary tests done on the quality of yarn spun on one Sundar Model Ambar charkha for a period of fourteen days (between 21st April, 1956 to 2nd May, 1956, and 22nd May, 1956 to 23rd May, 1956) and the comparative quality as well as the production tests carried out on the Sundar and the normal Ambar charkha by the same worker for a similar period (from 3rd May, 1956 to 16th May, 1956). The validity of the conclusions drawn from these experiments are obviously limited by the fact that the results relate to only one charkha operated by only one worker spinning over a period of a few days only.

## Materials used

In the preliminary tests rovings of 2·5 and 3·5 hank obtained at the Pilot Mill from combed *Vijay* (Ag. mark) cotton were used for nominal counts 20, 24 and 28 while the 3·1 hank roving from the same carded cotton was also used for spinning 28's count yarn. Some quantity of 1·38 hank roving also obtained from carded *Vijay* (Ag. mark) at the Pilot Mill was used to make 1·7, 1·9 and 2·4 rovings on the *Belani* for spinning to about 19's count on the Sundar charkha with different drafts. In all these studies, the mill roving was selected as the starting point in order to have an initial raw material of as uniform a quality as possible.

In the final series of production experiments, *Vijay* bale cotton was used to make 2·5 hank on the *Belani* and spun to 20's count on the Sundar as well as the normal Ambar charkhas. In the preliminary experiments both the paper and the flanged bobbins were used but in the final ones only the paper bobbins were used.

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## Experimental

*Preliminary Tests.*—Roving of 3·5 and 2·5 hank were spun to 28's and 20's respectively with a draft of 8 on the Sundar model using for each count both the paper and the flanged bobbins. Again both the types of bobbins were used for spinning 24's yarn from only 3·5 hank roving employing a draft of 7. In order to test the efficacy of the top roller spring weighting system two levels of spring pressure (medium and full) were used with the 7 as well as the 8 drafts. Medium pressure was obtained by unscrewing the top check nut by half a revolution. With the full spring pressure, a draft of 10 was also used and 24's yarn was spun from 2·5 hank roving, on both the paper and the flanged bobbins. Yarn quality tests for the count lea strength and irregularity were done. It was possible to make a study from this investigation of the effect of varying the draft, the top roller pressure and use of paper bobbins, on the quality of yarn spun by the Sundar model of Ambar charkha. Roving of 2·6 hank made on *Belani* from *Vijay*, cotton and a mill roving 3·5 hank (from carded Vijay Ag. mark) were spun respectively to 20's and 28's on the Sundar and the normal Ambar charkha and various yarn tests were made. Also from a mill inter of 1·38 hank (obtained from carded Vijay Ag mark in Pilot Mill) rovings of 1·7, 1·9 and 2:4 were made by processing it on a *Belani* once in all cases but with 4, 3 and 3 ends up in the creel and drafts of 5, 4·5 and 5 respectively. These were spun to a nominal 19's count on the Sundar Model with theoretical drafts of 12, 10 and 8 and all the yarn tests were carried out. Tables 1, 2 and 3 in the Appendix show the details of the tests.

Throughout the present stduy on the Sundar charkha, the spindle wharve diameter was 3/16″. In order to vary the turns per inch for different counts, the front roller delivery was maintained at about 6″ per revolution of main hand wheel while spinning 20's count yarn and at 5·5″ while spinning 24's and 28's. Once, however, a delivery of 6″ was employed for 28's count also. 5/0, 4/0 and 3/0 travellers were used for spinning 28's, 24's and 20's count yarns respectively. The tension of each spindle band was increased when needed by transferring it from one groove to another of the wooden spindle driving roller. Whenever the spring band of the main handle wheel had become slack it was retightened by cutting a little of it and piecing the ends again. The diameter of the paper bobbins used was 9/16″ (the same as those used for the normal Ambar charkha). The draft on this charkha was checked quite often while working and also after effecting any change in draft.

On the normal Ambar charkha, spindles with wharve diameters of 5/16″ and 9/32″ were used for spinning 20's and 28's count yarns respectively. The front roller delivery was 6″ per revolution of main handle wheel. Travellers used for the different counts were the same as those used on the Sundar model for the corresponding counts.

**Comparative Production and Quality Test**

As mentioned before, *Vijay* bale cotton was used as raw material. The worker used to clean and open the cotton on the Dhunai Modhia and make enough of 2:5 hang rovings on a *Belani*, using eight processes and a draft of 5·0. Every alternate day the previous day's rovings were spun on the Sundar as well as the normal Ambar charkha. Six days were spent in making rovings and the other six days in spinning. The draft employed on both the charkhas was 8·0. Various production and waste records were made for the *Dhunai Modhia* and the *Belani* working. The overall time as well as the actual spinning time on the charkhas and the end breaks in the process were recorded. Roving tests for hank and unevenness as also the usual yarn tests were carried out on each day's production. Full quantitative and qualitative test results are given in Tables 4, 5, 6 and 7 of the Appendix, which also include the time spent on repair and maintenance of the charkhas.

In the preliminary tests in all about 106 count and lea tests were made while about 92 count and lea tests, 190 twist tests and a large number of irregularity tests were carried out on yarns obtained during the subsequent production tests. The total amount of roving spun on both the Sundar Model and the normal Ambar charkha was over 1½ lbs.

## Discussion of results

*Preliminary Tests*—TABLE 1:—The lea strength values corrected for deviation of actual count from nominal value indicate that yarns of satisfactory quality in 20's and 24's counts have been spun on the Sundar Charkha but in 28's count the yarn is of a rather poor quality. The generally high strength of 20's and 24's yarn are due to the added use of good cotton and good quality rovings made in the Pilot Spinning Mill. Though a slightly lower strength is generally expected in 28's count yarn as compared to 24's, it is not clear why they have such very low strengths. Considering the performance at medium and full top roller spring pressures, except in the case of 28's count yarn spun from 3·5 mill roving on the flanged bobbins with a draft of 8·0, there is a general tendency for yarns of high strength to be spun when full top roll spring pressure is employed instead of the medium pressure. Though not clear, the strength values of yarns spun on flanged bobbins also show an increasing trend as compared with yarns of the same counts spun on the paper bobbins.

*TABLE* 2.—The data of yarn strength collected on the Sundar model as well as the normal Ambar charkha for the two days, on 20's and 28's count yarns indicate a somewhat higher yarn strength for the normal Ambar charkha in case of 20's count as compared with that for the Sundar Model. The validity of this conclusion will be further seen in the other experiments to be discussed presently. Due to some unknown discrepancy in the adjustment of charkha draft or for some other reason, a coarse count 23·5 was obtained on the normal charkha from a 3·5 mill roving. Due to the inaccuracy of strength corrections for large differences between the nominal and actual counts, these have not been made.

*TABLE* 3.—It will be seen from the figures for the average count that the yarn in general is coarser than what is expected with the hank of roving fed and draft adjusted, *viz.* about 19's & 19·5's. Even after giving due consideration for twist contraction it is seen that full draft is not exercised on the rovings. This will be indicated by the difference between the theoretical and actual drafts at the charkha. The turns per inch values as observed on a limited number of samples are quite low.

Considering all these factors it appears that there are chances of cord slippage in the drive from the main handle wheel to the other moving parts. The yarn strength corrected to a nominal count of 18's, is good on both the days with all the treatments (remembering that mill roving is used as a raw material and the various hank rovings made from it on the *Belani*. There is no definite pattern of yarn strength with draft. The percent mean deviations, as observed on the Fielden Walker Evenness Tester at a material speed of 5ft/minute do not also show any consistent trend between treatments. Yarns produced on both days from different hank rovings and corresponding drafts are fairly even.

## Comparative production and quality test

As mentioned before, out of the twelve days devoted to this programme, six days were spent in making enough of 2·5 hank rovings (including cleaning and opening operation on the *Dhunai Modhia)* and the other six days in spinning the rovings thus made on the Sundar Model as well as the normal Ambar charkha. On each of these six days spinning was done on both the charkhas one after another, by the same worker. Time utilised in hours by the worker for processing one pound of cotton through the *Dhunai Madhia* and *Belani* on each day as also the per cent waste removed in both these units are shown in Table 4. The average hank roving as seen from the table varies very little from day to day while the evenness of roving is also satisfactory. In Table 5 the average weight and length of yarn content per bobbin on both the charkhas, along with the respective daily and breakage rate are shown. Excepting on two days (9th and 11th), more end breakages per hour have been observed on the Ambar charkha than on the Sundar Model, the average rate for the former being 4·4 and for the latter 3·8. The breaks includes those accruing at the spindle tip, at the ring and those due to roller lapping, as also the multiple breaks. The com- processed daily on each of the two charkhas. Excepting on two charkhas is shown in Table 6 which also gives the weight of roving processed daily on each of the two charkhas. Excepting on two days *i.e.* on 11th and 16th the actual spinning as well as the total time utilised per pound of roving is less in the case of Sundar Model charkha than in the case of the normal unit. Average spinning and total time are 7·6 and 11·2 for Sundar Model and 9·2 and 12·6 for the normal Ambar charkha, respectively.

The decrease in production time as observed from the limited data available on the Sundar Model in comparison to the observations on the Ambar charkha, may be largely attributed to the Sundar charkha's very easy running involving a lesser amount of fatigue to the worker, though the average time spent on repair and maintenance was rather high in this case. The corresponding times spent on the two charkhas in regard to maintenance and repair are shown in the last two columns of Table 6. The yarn count. strength, unevenness and turns per inch results for the yarns spun on both the charkhas are given in Table VII. The corrected lea strength of yarns spun on the normal Ambar charkha is higher than that spun on the Sundar Model on all the days excepting the last, (16th). when the reverse is true. The yarn unevenness as given by the percent mean deviation figures indicate consistently a decrease in unevenness of yarns spun on the Sundar Model charkha as compared with the one spun on the normal unit. Considering the average daily turns per inch on yarn spun on the two charkhas it is seen that there is a substantial loss in the spindle speed due to slippage on both the machines, but to a larger extent on the Sundar Model. Thus the average turns per inch for six days is 14·0 for the Sundar Model and 16·5 for normal unit, whereas the expected value is about 20.

## GENERAL COMMENTS.

The following comments on the performance of the Sundar charkha are offered in the light of the present studies:—

1. Yarns of 18's, 20's and 24's count with satisfactory quality could be made on the charkha from rovings of *Vijay* cotton made either in Pilot Mill or on the Belani under optimum conditions. The 28's count yarn made from roving of *Vijay* combed cotton however showed a low lea strength.
2. Any decrease in the top roller spring weighting from its present maximum value (when the check nut is tight), has a tendency to decrease the yarn quality. It is not clear whether the present maximum weighting on both the top rollers as well as on either of them is optimum or not. Further tests should be made to verify this aspect. It is also essential to protect the spring strip used for weighting from any harmful effects of climate.
3. Though the flanged bobbins supplied with the charkha show indications of giving yarn of high strength they have to be improved further in order to eliminate the end breaks they cause due to the yarn touching the top flange-edge before it is wound on to the bobbin. This difficulty compels one to use rather light travellers (in order to get large diameter balloons) with the natural result that the bobbins are wound loose.
4. There seems to be a good amount of slippage in the moving parts of the charkha commencing from the main handle wheel. This may be due to the frequent stretching of the curtain spring used for the drive. During the present study this spring had to be cut twice and repieced in order to bring in the desired amount of tension. It would be probably useful to try a larger diameter handle wheel than the one employed at present and reduce the total number of pulleys used as far as possible.
5. The existing system of maintaining the spindle band tension is not very sound. Since the wooden pulley driving the spindles has only three grooves of different diameters for each spindle, there is no scope for maintaining the band tension continuously over a long time. A continuous maintenance of tension is preferable to this frequent adjustment, as one does not know when the band tension has changed.

   The 3/16" diameter wharve used on the spindles seems to be too small and assists in increasing the slippage. A larger wharve diameter has therefore to be used. It is also in accordance with the general principles of working of ring frames to have the same wharve diameter but enable changes to be made in the turns per inch possible to suit the different counts, by varying the front roller delivery. With this arrangement, for coarse counts the front roller speed or in other words production has to be increased in order to incorporate less twist in the yarn. On this charkha there is a rather limited scope for varying the front roller delivery considering the fact that it should be possible to change the turns per inch from about 14.0 to about 26.0 (for counts from 12 to 32's). There is enough reason to believe from the data available that there is a substantial reduction in the spindle speed due to slippage.

6. There is a tendency for yarn spun on the normal Ambar charkha to show higher strength than that on the Sundar Model. This may be partly due to the greater loss in turns per inch suffered by the yarn spun on the latter. The yarn evenness is, on the otherhand improved by the Sundar Model, probably on account of the smooth and frictionless running of the drafting rollers.
7. Due to the very easy running of the Sundar Model by the use of a number of locally made ball-bearings, it is possible to spin more yarn on this machine than on the normal charkha, in a given time.
8. No tests have been made here to see the stability and durability of the ball-bearings used. It is essential to study this aspect carefully before establishing the suitability of the type of ball-bearings used.
9. It is necessary to make proper arrangements to make the charkha suitable for spinning short, medium as well as long staple cottons. At present there is a fixed centre to centre distance between the rollers but it is necessary to have separate roller stands with other centre to centre distances also, in order to have the facility for processing a range of cottons.

These investigations have been completed on only one type of cotton spun to three counts and only one charkha operated by a single worker has been used for a limited time. This being the case the conclusions drawn are mainly indicative. It would be very useful to study the performance of a larger number of charkhas operated by an equally large number of workers spinning different cottons to possible counts over a longer duration, after the model is put in its final form. Such a bulk study would obviously give more valid information regarding the quality and the quantity of the yarn prepared on this machine.

SD/- B. K. VAIDYA,
Assistant Director,

Physics & Physical Chemistry Division.
SD/- B. R. RAMASWAMI,

Senior Scientific Officer,
Liaison Division.

AHMEDABAD,
20-6-1956.

## TABLE I.

Count, Lea Strength and Irregularity of yarn spun on the Sundar Model of Ambar Charkha using different drafts, hank rovings, bobbins and top roll Spring pressure.

| Date | Cotton Vijay Ag. mark | Mill roving hank | Top roller spring pressure | Drafts | Bobbin | No. of leas tested | Nominal count | Maximum count | Mini-mum count | Average count | Maxi-mum strength | Mini-mum Strength | Minimum Average strength | Strength corrected for nominal count | Percent mean devia-tion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 23-4-56 | Combed | 3·5 | Medium | 7 | Flanged | 8 | 24 | 24·5 | 21·7 | 23·1 | 87·0 | 72·0 | 78·1 | 73·9 | 11·24 |
| 24-4-56 | ,, | 3·5 | ,, | 7 | Paper | 4 | 24 | 23·5 | 22·4 | 23·0 | 83·5 | 69·0 | 76·8 | 72·1 | 11·67 |
| 21-4-56 | ,, | 3·5 | ,, | 8 | Flanged | 4 | 28 | 29·0 | 27·0 | 27·8 | 31·0 | 19·0 | 24·0 | 23·6 | .. |
| 22-4-56 | ,, | 3·5 | ,, | 8 | ,, | 8 | 28 | 32·0 | 29·1 | 30·7 | 39·0 | 20·5 | 27·6 | 33·4 | 12·54 |
| 27-4-56 |  | 2·5 | ,, | 8 | ,, | 4 | 20 | 20·2 | 19·6 | 19·9 | 106·0 | 81·5 | 97·1 | 96·4 | 10·38 |
| 25-4-56 | ,, | 3·5 | ,, | 8 | Paper | 4 | 28 | 31·2 | 29·4 | 30·3 | 37·0 | 30·0 | 32·5 | 37·8 | 13·30 |
| 27-4-56 | ,, | 2·5 | ,, | 8 | Paper | 4 | 20 | 19·7 | 19·4 | 19·6 | 102·0 | 57·0 | 88·6 | 86·1 | 10·49 |
| 25-4-56 | ,, | 3·5 | Full | 7 | Flanged | 4 | 24 | 24·6 | 23·7 | 24·1 | 78·5 | 72·0 | 75·5 | 77·3 | 12·46 |
| 21-4-56 | ,, | 3·5 | ,, | 8 | ,, | 2 | 28 | 28·7 | 28·2 | 28·4 | 26·0 | 15·5 | 20·8 | 21·6 | .. |
| 24-4-56 | ,, | 3·5 | ,, | 8 | ,, | 8 | 28 | 29·2 | 27·4 | 28·5 | 51·0 | 26·0 | 34·1 | 35·3 | 12·30 |
| 26-4-56 | ,, | 2·5 | ,, | 8 | ,, | 4 | 20 | 19·7 | 19·2 | 19·5 | 116·0 | 90·5 | 102·4 | 98·9 | .. |
| 23-4-56 | ,, | 3·5 | ,, | 8 | Paper | 8 | 28 | 30·9 | 28·6 | 29·7 | 41·5 | 27·0 | 34·4 | 38·4 | 11·99 |
| 26-4-56 | ,, | 2·5 | ,, | 8 | ,, | 4 | 20 | 20·3 | 19·5 | 19·9 | 101·5 | 95·0 | 98·6 | 97·9 | .. |
| 25-4-56 | ,, | 2·5 | ,, | 10 | Flanged | 4 | 24 | 28·8 | 23·7 | 25·7 | 78·5 | 58·5 | 71·5 | 79·0 | 12·10 |
| 25-4-56 | ,, | 2·5 | ,, | 10 | Paper | 4 | 24 | 26·0 | 23·7 | 24·5 | 78·5 | 43·0 | 66·9 | 69·0 | 11·47 |

## TABLE 2

Comparison between yarn count, Lea strength and irregularity of yarns spun on the Sundar Model (s) and the normal Ambar Charkha (A).

| Date | Cotton | Roving hank | Top roller spring pressure | Draft | Bobbin | No. of leas tested | Nominal count | Maximum count | | Minimum count | | Average count | | Maximum strength | | Minimum strength | | Average strength | | Corrected strength for nominal count | | Per cent mean deviation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | | 15 | | 16 | |
| | | | | | | | | S | A | S | A | S | A | S | A | S | A | S | A | S | A | S | A |
| 1 -56 | Vijay | 2·6 Belni Roving | Full Pressure on top rollers of Sunder Model | 8 | Paper | 4 | 20 | 23·0 | 20·6 | 21·0 | 19·2 | 21·8 | 20·0 | 83·0 | 89·0 | 59·0 | 74·0 | 67·5 | 81·5 | 77·0 | 81·5 | 14·10 | 16·14 |
| 2-5-56 | Vijay Ag. mark (carded) | 3·5 Mill Roving | do. | 8 | Paper | 4 | 28 | 27·2 | 24·3 | 26·7 | 22·7 | 27·0 | 23·5 | 53·0 | 75·0 | 33·0 | 60·0 | 42·4 | 66·5 | 39·7 | | | 14·78<br>13·6 |

## TABLE 3

*Count, Lea Strength, Irregularity and turns per inch of yarns spun on the Sundar Model using different roving hanks and drafts*

| Date | Roving hank | Theoretical draft in Charkha | Actual darft in Charkha | No. of leas tested | Maximum count | Minimum count | Average count | Maximum strength | Minimum strength | Average strength | Corrected strength for count of 18's | Per cent mean deviation | *Average T.P.I. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 23-5-56 . . . | 1·7 | 12 | 10·5 | 4 | 18·0 | 17·6 | 17·8 | 114·0 | 96·5 | 106·0 | 104·4 | 10·90 | 15·9 |
| 23-5-56 . . . | 1·9 | 10 | 9·7 | 4 | 19·2 | 17·9 | 18·5 | 107·0 | 90·0 | 97·7 | 101·5 | 12·08 | 14·6 |
| 23-5-56 . . . | 2·4 | 8 | 7·0 | 4 | 17·2 | 16·5 | 16·9 | 123·0 | 116·0 | 118·7 | 109·0 | 11·04 | 15·3 |
| 22-5-56 . . . | 1·7 | 12 | 10·6 | 4 | 18·3 | 17·9 | 18·1 | 104·5 | 97·0 | 101·6 | 102·4 | 12·29 | 16·1 |
| 22-5-56 . . . | 1·9 | 10 | 9·3 | 4 | 18·0 | 17·3 | 17·7 | 119·0 | 104·5 | 113·5 | 111·0 | 11·55 | 16·1 |
| 22-5-56 . . . | 2·4 | 8 | 7·3 | 4 | 17·7 | 17·1 | 17·5 | 119·5 | 103·0 | 107·9 | 103·8 | 11·51 | 14·0 |

*Per cent mean deviation determined on the Fielden Walker Evenness Tester with a material speed of 5 ft./minute.

## TABLE 4

*Effective time required, in hours, to process one pound of cotton through Dhunai Modhia and Belani and the Percent Waste removed at each of the two stages with Average roving hank and its irregularity.*

| Date | Effective time in hours for cleaning and carding one lb. Cotton on Dhunai Modhia | Effective time in hours for making roving from one lb. cotton Belani | Percent waste in cleaning and carding | Percent waste in Belani | Average roving hank | Percent mean* Deviation of roving |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3-5-56 . . | 5·0 | 7·8 | 10·0 | 5·6 | 2·52 | .. |
| 5-5-56 . . | 5·0 | 9·5 | 5·0 | 2·6 | 2·56 | 8·17 |
| 8-5-56 . . | 5·6 | 14·3 | 8·8 | 3·6 | 2·60 | 9·04 |
| 10-5-56 . . | 9·2 | 13·6 | 4·2 | 4·5 | 2·60 | 8·53 |
| 12-5-56 . . | 4·2 | 10·0 | 8·3 | 4·2 | 2·56 | .. |
| 15-5-56 . . | 4·4 | 8·9 | 5·6 | 5·6 | 2·56 | .. |

*Percent mean deviation determined on the Fielden Walker Evenness Tester at a material speed of 5 ft./minute.

A.T.I.R.A.

## TABLE 5

*Comparison between the average Weight and Length of Yarn wrapped per bobbin and end breaks in spinning on four Spindles per hour, as observed on the Sundar (s) and the Normal Ambar Charkha (A).*

| Date | Average weight/bobbin (Tola) | | Average length in yards | | Breaks per effective hour per four spindles including multiple breaks. | |
|---|---|---|---|---|---|---|
| | S | A | S | A | S | A |
| 4-5-56 . . | 0·50 | 0·50 | 205·8 | 210·0 | 2·0 | 3·2 |
| 7-5-56 . . | 0·75 | 0·75 | 294·5 | 311·8 | 2·0 | 4·0 |
| 9-5-56 . . | 0·75 | 0·81 | 299·2 | 335·1 | 4·0 | 2·7 |
| 11-5-56 . . | 0·63 | 0·3 | 284·4 | 295·0 | 6·0 | 4·0 |
| 14-5-56 . . | 0·75 | 0·50 | 330·7 | 221·6 | 5·3 | 8·0 |
| 16-5-56 . . | 0·60 | 0·50 | 259·6 | 221·6 | 3·6 | 4·7 |

S :—Sundar Charkha

A :—Ambar Charkha.

## TABLE 6

*Yarn production in hours pound on the Sundar (S) and the Normal Ambar Charkha (A).*

| Date | Weight of roving spun (Tolas) | | Time for spinning one lb. of roving (hours) | | Total time including the miscellaneous for one lb. (hours) | | Time for repair and maintenance (Minutes) | |
|---|---|---|---|---|---|---|---|---|
| | S | A | S | A | S | A | S | A |
| 4-5-56 . . | 4 | 4 | 10·0 | 12·5 | 14·2 | 16·7 | 5 | 20 |
| 7-5-56 . . | 6 | 6 | 6·7 | 8·3 | 9·5 | 11·1 | 5 | 5 |
| 9-5-56 . . | 6 | 6·5 | 8·3 | 9·2 | 11·3 | 11·6 | 30 | 7 |
| 11-5-56 . . | 2·5 | 2·5 | 8·0 | 8·0 | 12·5 | 12·5 | 0 | 0 |
| 14-5-56 . . | 6 | 2 | 5·0 | 10·0 | 7·6 | 14·0 | 0 | 15 |
| 16-5-56 . . | 12 | 8 | 7·5 | 7·5 | 12·0] | 9·8 | 15 | 0 |

S :—Sundar Charkha

A :—Normal Ambar Charkha

## TABLE 7

Count, Lea Strength Irregularity and turns per inch characteristics in the Sundar (S) and the Ambar Charkha (A) Yarns

| Date | No. of leas tested. | Maximum count | | Minimum count | | Average count | | Maximum strength | | Minimum strength | | Average strength | | Strength corrected for 20 nominals | | Per cent mean (a) deviation | | Turns per inch (b) | | No. of twist tests | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | S | A | S | A | S | A | S | A | S | A | S | A | S | A | S | A | S | A | S | A |
| 4-5-56 . . . . | 8 | 20·2 | 20·6 | 18·9 | 19·5 | 19·6 | 20·0 | 85·0 | 85·0 | 66·0 | 69·0 | 75·6 | 79·9 | 73·3 | 79·9 | 12·93 | 14·67 | .. | 17·1 | .. | 20 |
| 7-5-56 . . . . | 8 | 19·2 | 20·7 | 18·2 | 18·9 | 18·7 | 19·8 | 100·0 | 93·0 | 45·5 | 65·5 | 84·8 | 78·8 | 76·8 | 77·6 | 12·16 | 14·26 | 13·3 | 18·4 | 20 | 10 |
| 9-5-56 . . . . | 5 | 19·7 | 20·0 | 18·3 | 19·2 | 19·0 | 19·7 | 85·0 | 89·0 | 65·0 | 65·0 | 77·2 | 79·6 | 71·4 | 77·8 | 14·18 | 15·61 | 15·3 | 15.8 | 20 | 20 |
| 11-5-56 . . . . | 4 | 22·1 | 23·2 | 20·9 | 21·1 | 21.5 | 22·3 | 61·5 | 67·0 | 52·0 | 50·0 | 55·2 | 57·6 | 62·2 | 68·6 | 13·43 | 15·94 | 13·0 | 17·4 | 10 | 10 |
| 14-5-56 . . . . | S. 8<br>A. 4 | 25·6 | 22·0 | 19·5 | 20·4 | 21·0 | 21·1 | 62·0 | 71·0 | 37·5 | 58·0 | 51·9 | 62·6 | 56·4 | 68·1 | 15·01 | 15·32 | 14·2 | 15·6 | 20 | 10 |
| 16-5-56 . . . | S.19<br>A. 11 | 22·5 | 25·2 | 18·0 | 19·5 | 20·6 | 21·1 | 110·0 | 73·0 | 53·0 | 42·0 | 75·5 | 62·3 | 78·9 | 67·8 | 13·71 | 15·34 | 14·4 | 15·0 | 25 | 25 |

S :—Sundar Charkha

A :—Normal Ambar Charkha

(a) Per cent mean deviation obtained on the Fielden Walker Evenness Tester the material speed being 5ft./minute.

(b) Length of the test specimen 1"

## III

Copy of Textile Commissioner's office letter No. P&D/UNEC/15/892-3 dated 22nd August, 1955 addressed to the Director Technological Laboratory, Matunga.

Subject:—*Experiments with Ambar charkha*

I am directed to furnish the following points which might be of use to you while deciding a comprehensive scheme for conducting experiments on Ambar **charkha.**

(1) Mechanical condition *i.e.* whether the charkha is mechanically sound and can stand the strain of continuous operation.

(2) Whether the charkha has suitable arrangements for processing cottons of different staple length and for varying the count, the draft, the twist etc.

(3) The production per spindle for 8 hours for different counts and the efficiency obtainable when operated at a speed which can be maintained over a long period.

(4) The range of count of yarn that can be spun from important varieties of cotton.

(5) The evenness of the yarn spun, its cleanliness, neppiness, the regularity of flow of twist and the count lea strength product.

(6) The percentage of waste produced for the different types of cotton.

(7) The number of men required on the various processes and the production that is possible in poundage.

(8) The statistical analysis of the data obtained and comparison of the same with data for mill yarn.

(9) The quality of cloth woven on handloom out of yarn produced on Ambar charkha and the difficulties, if any, experienced in weaving of this yarn.

(10) Comparison of cloth produced from yarn produced by Ambar charkha with similar cloth produced on handloom from mill yarn.

We shall be thankful if you could enlighten us about the scheme when you are in a position to finalise it.

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Copy of letter No. KHE/Ambar/248 dated 17-9-1955 from All India Khadi and Village Industries Board, Queens Road, Bombay, addressed to Shri A. C. Chaudhuri, Deputy Director, Office of the Textile Commissioner, Bombay.

Subject:—*Experiments on Ambar charkha yarn.*

In continuation of this office letter No. KHE/Ambar dated 12th September, 1955 I have to state that our Shri Puratan Buch had an opportunity of contacting Shri Nandlal Patel the expert on Ambar charkha of the Sarva Sewa Sangh, Billimora recently. He has suggested the following points to be considered by the Textile

Technological Laboratories, which are experimenting on the Ambar charkha yarn.

(1) The Ambar charkha yarn must be wetted and hank allowed to be dried on the falka, and then only it should be taken for laboratory test. In spinning mills the yarn is humidified. Wetting of the yarn would thus be akin to that process. The yarn which is not moistened as above may not give the actual results.

(2) The twist of the Ambar charkha yarn should also be tested and the Khadi Board should be informed regarding the percentage of unevenness in the twist, in comparison with that of the mill yarn.

(3) The Textile Technological Laboratories should help us in yet perfecting the device and process of spinning yarn on the Ambar charkha, by suggesting technical improvements, if it is found necessary, while testing yarn in the laboratories under different conditions.

It is requested that the above suggestions from the Sarva Sewa Sangh on Ambar charkha will be circulated to the experimenting laboratories for favour of information.

COPY OF THE TEXTILE COMMISSIONER'S OFFICE LETTER No. P & D/UNEC/15/3401 DATED 16TH JANUARY, 1956 ADDRESSED TO THE DIRECTOR, THE AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION, NAVRANGPURA, AHMEDABAD-9.

SUBJECT:—*Experiments on Ambar charkha.*

सत्यमेव जयते

We had been intimated by the All India Khadi and village Industries Board and the Ministry of Production to request you to devote special attention towards examining the Ambar charkha sets for immediate adjustments or improvements to make them more efficient instruments of production. This is in addition to the points furnished to you for consideration in this office letter of even number dated 22/23rd August, 1955. We shall be grateful if you will kindly consider this aspect and favour us with your opinion at an early date.

COPY OF THE TEXTILE COMMISSIONER'S OFFICE LETTER No. P&D/UNEC/19/3403 DATED 16TH JANUARY, 1956 ADDRESSED TO THE DIRECTOR TECHNOLOGICAL LABORATORY, INDIAN CENTRAL COTTON COMMITTEE, ADENWALA ROAD MATUNGA, BOMBAY-19.

SUBJECT:—*Experiments on Ambar charkha.*

We had been intimated by the All India Khadi and Village Industries Board, and the Ministry of Production to request you to devote special attention towards examining the Ambar charkha sets for immediate adjustments or improvements to make them more efficient instruments of production. This is in addition to the points furnished to you for consideration in this office letter of even number dated 22nd August, 1955. We shall be grateful if you will kindly consider this aspect and favour us with your opinion at an early date.

Copy to:—

Ministry of Production, Thapar House, Queensway, New Delhi. This has relation to the D.O. No. 12-Cot. Ind.(1)(3)/55 dated 6th January, 1956 from Mrs. P. Johari addressed to Shri Nanjappa. A copy of this office letter of even number dated 22nd August, 1955 furnishing various points in connection with the Ambar charkha experiments is enclosed for information.

## IV

## *A NOTE ON "KHADI".*

Hand-spinning and hand-weaving have been India's traditional village industries. It is a matter of record that the spinning wheel (Charkha) was being universally plied in most Indian homes. Every process from fibre to fabric was done by hand. The quality and count of yarn and the texture and fineness of the cloth woven by the Indian spinners and weavers constituted the wonder of the old world. India had a large and extensive export trade of cotton textiles. Even as late as 1702, the import of Indian cotton fabrics into England alone amounted to £1,053,725. Foreign visitors spoke in glowing terms of texture of Indian cottons.

2. The deterioration, decay and total extermination of India's textile industry can best be summed up in the words of Karl Marx who wrote in 1850, as under:—

> "The handloom and spinning wheel, producing their regular myriads of spinners and weavers were the pivots of the Indian Society. It was the British intruder who broke up the Indian handloom and destroyed the spinning wheel. England began with driving the Indian cottons from the European markets; it then introduced twist into Hindustan and in the end inundated the very mother country of cotton with cottons. British steam and science uprooted, over the whole surface of Hindustan, the union between agriculture and manufacturing industry."

The imports of British piecegoods into India steadily expanded and simultaneously the export of raw cotton from India to U.K., increased.

3. The Indian Textile Industry came to its own with the rising tempo of the liberation movement. The Swadeshi movement gathered momentum with the dawn of the twentieth century Khadi (hand-spun and hand-woven cloth) was then unheard of and handlooms worked with mill yarn. It was in the year 1916, when Gandhiji returned to India from South Africa that he talked about Khadi. An earnest and impatient quest for the charkha and the handspinner began. It was not till 1917, that wheels and spinners

were found in Vijaypur village in Baroda. Most homes in Vijaypur had wheels but none plied them. Spinners were prepared to start again but had to be supplied with cotton slivers. Neither Gandhiji nor his associates at that time, had any knowledge of processing of cotton. It was only after further quest that some idea of it could be had. A start was made with mill slivers.

4. By 1921, Khadi began to be produced and worn. The All India Congress Committee met at Bezwada at the end of March 1922 and passed a resolution urging the collection of one crore of rupees by the enlistment of one crore of Congress members and the manufacture and operation of twenty lakhs Charkhas. It was at Bezwada that Gandhiji discovered that in Andhra women grew cotton in their back-yards, cleaned and carded it and spun with the livers so prepared on their own charkhas made decades previously. It was further discovered that in Andhra there prevailed an ancient custom of presenting to brides fine charkhas as marriage gifts. In fact, in Andhra the marriage custom required a yoke to be placed on the necks of the bride and bridegroom and a charkha to be presented to the bride as if to show that they were to plough the land and spin the yarn and figuratively to work as team. There is evidence to show that weaving was an accomplishment much valued in the matrimonial market. To quote from the Kanungo Committee report:—

> "Unique among the States of India, Assam has "a strong domestic weaving tradition and it is "said even today it would be difficult for a "girl in Assam to get married if she does not "herself weave her bridal clothes. Indeed, the "Committee, during its tours, actually saw a "girl student of the Gauhati University weaving "her own clothes during the summer holidays."

5. Khadi weaving became a primary condition for congressmen and as the tempo of the Non-Co-operation Movement rose, the impetus to Khadi also grew. The Khadi movement started as a part of the Congress movement and functioned within its orbit and framework. Production and sale of Khadi was undertaken by the Working Committee. This activity was started in 1921, with a capital of about Rs. 3 lakhs. Khadi soon caught the imagination of the masses and by 1923, investment in Khadi rose to Rs. 23 lakhs. Towards the end of 1923, the Congress set up an All India Khadi Board to guide the Pradesh Boards and to co-ordinate their activities.

6. The activities expanded to such an extent as to necessitate the setting up of an organization exclusively for the development of Khadi Industry. Accordingly, in September 1925, the All India Congress Committee decided to set up an independent body which, though an integral part of the All India Congress, would function with complete autonomy. This new body was known as the All India Spinners Association (Charkha Sangh). The assets and funds of the All India Khadi Board and the Pradesh Boards were made over to the new body.

7. The work of the Charkha Sangh can be divided into three periods from the point of view of the special emphasis laid by it on the different aspects of the Charkha. Each period marks a distinct progress towards one or other aspects of the Charkha. Upto 1933, the Khadi work was more or less of a commercial nature affording relief to the poor and the needy. Then came the second period which extended upto 1943. During this period, the idea of paying a living wage was introduced. After 1944, the third phase started. The emphasis during this phase, came to be on the Charkha as the symbol of truth and non-violence, self-sufficiency in the essential needs of living etc.

In the first ten years 1925—35, the activities centred round the propagation, production and sale of Khadi. The commercial aspects predominated. The primary object was to spread the activity as wide as possible in order to provide employment to the needy and the destitute in rural areas. As Khadi became popular, private agencies began to intrude into the life of the poor villager. These agencies exploited the cheap and destitute labour and indulged in profiteering. This showed the enormity of the poverty of the rural population and its readiness to take to any occupation which supplemented their income even by a fractional degree. All the same exploitation of the poverty of rural masses for private profiteering was a disturbing factor. In 1935, the Charkha Sangh accepted the principle of a fair wage for the spinners and decided that a spinner should get at least one anna per hour of spinning. Increased wages meant higher costs of production. The introduction of the fair wage system made Khadi dearer and production had therefore, to be curtailed. Khadi produced under the fair wage system alone was regarded as pure Khadi and was certified as such by the Sangh. In September 1939, the world war broke out. War shortages gave a fillip to Khadi. What is significant is that mill cloth prices began to soar but Khadi continued to be sold at its fixed price without any profit element. There was a time when Khadi sold cheaper than mill cloth. With the incarceration of political leaders, Khadi work suffered. In 1945, the whole concept of Khadi work was revolutionized. The guiding principles were that "instead of depending on organizations that could be destroyed, the charkha should find its own place in every home. Instead of the spinning wheel being plied ordinarily for wages, it should be plied with a view to self-sufficiency in cloth and with a full understanding of the implications of spinning". Production policy was orientated to the achievement of self-sufficiency. "Let all those who spin wear Khadi and let no one who wears Khadi, fail to spin.'

8. In February 1953, the All India Khadi and Village Industries Board was constituted by Government. The Board is responsible "for preparing and organizing programmes for the production and development of Khadi and Village Industries including training of personnel manufacture and supply of equipment, supply of raw materials, marketing and research and study of the economic problems of different village industries. The Board will also function as a clearing house of information and experience relating to these industries." The Khadi Board constituted by Government took

over from the Sarva Seva Sangh the functions relating to the production and sale of Khadi. Thus, another phase in the history of Khadi started from 1953.

9. The Khadi Board has implemented the programmes for the predecessor of the Khadi Industry on the lines laid down by its predecessor—the Charkha Sangh. The programmes of the Board provide for the production and sale of Khadi through the centres run by it and by registered bodies. The Board is helping the production centres in more than one way. The Khadi Board has a non-revolving capital of Rs. 140 lakhs at its disposal which is utilized for the purchase in bulk of cotton and other raw materials required for the production of Khadi. Supplies of these materials are made to the production centres according to their requirements on no-profit and no loss basis. This arrangement ensures supplies to centres at whole-sale rates. The Khadi Board also gives loans to production centres, which are interest free and are re-payable and renewable on easy terms. The loans are ordinarily tenable for one year, but if repayment is made of 1/10th of the loan after one year, it is renewed for another year. The production centres are also given production subsidy to serve as an incentive which works out roughly to one anna in the rupee worth of production of Khadi. Implements required for the production of Khadi are supplied to the Centres on subsidized basis, that is to say 50% of the cost. All these financial measures are intended to reduce the cost of production of Khadi. But for these measures, the price of Khadi would be higher than what it is. It is difficult to calculate the exact effect of these measures on built-up cost of Khadi.

10. According to the estimates of the Khadi Board, overhead charges, that is to say expenditure involved in the purchase of cotton, supplying it to spinners, collecting the yarn and supplying it to weavers and then collecting the woven material and marketing it, comes to about 18¾% or annas 3 in the rupee. The problems of Khadi production are peculiar. Unlike composite mills, which have spinning, weaving and finishing departments at one place, Khadi centres have no fixed places of work where labour is employed for fixed hours. Cotton is distributed to spinners who work in their cottages and periodically turn up to account for the yarn and to get their wages. The yarn is then distributed to weavers who are generally located at some distance (the Khadi Board has got a scheme for the rehabilitation of weavers in spinning centres). Through the Khadi Board, Government pays rebate on all retail sales of Khadi at the rate of annas 3 in the rupee. This rebate is intended to reduce price disparity between Khadi and mill cloth.

11. The price of Khadi per unit of production is higher than that of mill cloth. It is argued that the higher price which a consumer pays goes to the unemployed or under-employed artisan and is not to swell the profits of the capitalists. According to the Millowners' Association, "out of every rupee representing the income of cotton mill Company, wages and salaries amount to about four annas." On the other hand, in every rupee of Khadi produced, wages alone come to ten annas and six pies. There is no wasteful expenditure on intermediary profiteering in the Khadi industry.

Although there is price disparity between Khadi and mill cloth, there are sworn Khadarites who would buy Khadi whatever its price may be. As observed by the Kanungo Committee "use of Khadi by a person for himself and for his family is a matter which has an ethical, philosophical and emotional content, transcending economic aspect." The higher price which a consumer pays for Khadi is, in effect, his contribution to a national programme—the programme being that of finding remunerative, productive work for large numbers who are either under-employed or wholly unemployed in the villages which constitute India.

12. As mentioned earlier, the Charkha Sangh adopted 'Fair Wage' policy in the production of Khadi. In order to distinguish Khadi which was produced in conformity with the principles laid down the Sangh introduced the scheme for the certification of Khadi. The scheme covered certification of Khadi production centres, certification of the produce and certification of sales depots (bhandars). The Khadi Board has continued the scheme and is maintaining a central Certification office in Lucknow. Rebate of 3 annas in the rupee is allowed on the sale of certified Khadi at certified *Bhandars* only.

13. There is reason to believe that spurious Khadi has been sold from time to time and is still being sold. In 1950, the Khaddar (Protection of name) Act 1950 was passed. Under this Act, the words "Khaddar" and "Khadi" whether in Hindi or any other language or English when applied to any woven material, shall be deemed to be a trade description within the meaning of the Indian Merchandise Marks Act, indicating that such material is cloth woven on handlooms in India from cotton, silk or woollen yarn handspun in India or from a mixture of any two or all of such yarns. This legislative measure as it stands at present, is ineffective as there is no adequate machinery for the prosecution of offenders. At the time the legislation was enacted, the intention was that complementary legislation would be enacted by the State Legislatures to provide for the machinery for the prosecution of those charged with the sale of spurious Khadi. A model sale of Khaddar Bill has been prepared which would be finalized shortly in consultation with the interests concerned. Once this legislation is enacted, there would be adequate machinery for the prosecution and punishment of those charged with the sale of spurious Khadi.

14. The programmes for the development of Khadi and other handloom industries are being financed from the cess of three pies (¼ anna) per yard levied on mill cloth under the provisions of the Khadi and other Handloom Industries Development (Additional Excise Duty on cloth) Act, 1953. The arguments in favour of the levy of excise duty on mill cloth are summed up by the Karve Committee in the following words:

"The Excise duty in this context may be said to have three objectives. The first is the raising of funds from the consumers of a product for rehabilitating a section of the producers of that product. In so far as the specially large investment of national resources in a particular section of industry has afforded a differential advantage to consumers of the products of that section, the rehabilitation of the more backward sections in the same industry can reasonably be accepted as a responsibility by them. The second objective is that of draining away from *entrepreneurs* in the advanced section the extra profits that will accrue to them from national policy. Limitation of further expansion or increased production will create for the products of this section a closed market in which the *entrepreneurs* in this Section will, unless prevented by measures of direct control, charge higher prices. As this is a result of total national policy, there is no reason why the surplus flowing from these higher prices should be allowed to remain with these *entrepreneurs.* A third objective or rather result of the levy of the excise would be the creation of price differentials in favour of the small scale and village industry".

As regards the level of the excise duty, the Kanungo Committee considered the suggestion of equating mill and handloom prices by the levy of a heavy excise duty or cess on the mill sector but recommended categorically that such a device was not feasible. In the second Five Year Plan, programmes for the development of Khadi and handloom industries would be undertaken on a larger scale involving expenditure of more funds. A proposal that the rate of cess on mill cloth be increased by the amendment of the Act of 1953, is already under consideration.

15. Development of Khadi industry is now the responsibility of Government which is being discharged through the Khadi Board. Government itself is the biggest single purchaser of Khadi.

16. Two tables are attached:—

(i) showing the year-wise production and sale of Khadi, and

(ii) showing the year-wise purchases of Khadi made by Government.

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## TABLE I

### *Showing Year-Wise Production and Sale of Khadi.*

| Year | Production in Rs. | Production in Sq. Yds. | Sales in Rupees |
|---|---|---|---|
| 1924-25 | 19,03,034 | .. | 33,61,061 |
| 1925-26 | 23,77,670 | .. | 29,99,143 |
| 1926-27 | 24,06,370 | .. | 33,48,794 |
| 1927-28 | 24,16,382 | .. | 33,08,643 |
| 1928-29 | 31,55,437 | 62,61,812 | 39,41,077 |
| 1929-30 | 54,11,610 | 1,16,76,930 | 66,98,813 |
| 1930-31 | 72,15,402 | 1,75,76,576 | 90,94,132 |
| 1931-32 | 44,78,195 | 1,15,06,883 | 58,12,537 |
| 1933 | 38,68,810 | 1,02,24,344 | 51,75,926 |
| 1934 | 34,06,380 | 95,80,986 | 46,67,125 |
| 1935 | 32,44,105 | 85,61,737 | 46,90,013 |
| 1936 | 24,28,257 | 62,32,697 | 34,47,741 |
| 1937 | 30,15,639 | 72,69,817 | 45,32,7 |
| 1938 | 54,99,486 | 1,25,59,594 | 54,78,720 |
| 1939 | 48,29,610 | 1,08,95,608 | 64,13,002 |
| 1940 | 51,36,983 | 95,11,438 | 77,62,753 |
| 1941-42 | 1,20,02,430 | 2,15,84,076 | 1,49,85,510 |
| 1942-43 | 78,62,368 | 1,00,45,214 | 1,07,90,412 |
| 1943-44 | 1,27,52,233 | 1,08,80,739 | 1,32,61,640 |
| 1944-45 | 1,34,58,069 | 1,02,63,903 | 1,67,87,970 |
| 1945-46 | 70,63,219 | 52,76,995 | 1,04,86,530 |
| 1946-47 | 1,05,68,870 | 70,05,473 | 1,11,95,131 |
| 1947-48 | 65,74,689 | 43,51,646 | 72,46,604 |
| 1948-49 | 1,04,42,965 | 69,33,948 | 91,41,412 |
| 1949-50 | 1,11,40,936 | 71,59,407 | 1,34,50,166 |
| 1950-51 | 1,27,45,295 | 72,88,701 | 1,64,98,678 |
| 1951-52 | (Authentic figures not available). | | |
| 1952-53 (Jan.-Dec. 1952) | 1,94,00,798 | .. | 1,94,89,403 |
| 1953-54 | 2,44,36,121 | 1,22,55,318 | 1,82,84,511 |
| 1954-55 | 3,14,31,057 | 1,65,21,414 | 2,58,18,360 |
| 1955-56 (Up to Dec. 1955). | 3,13,26,811 | 1,61,42,861 | 2,44,02,733 |

## TABLE II

### *Showing the Year-Wise Purchase of Khadi made by Government*

| Years | Value (Rs.) |
|---|---|
| (i) 1952-53 | 27,308 |
| (ii) 1953-54 | 3,75,000 |
| (iii) 1954-55 | 28,78,000 |
| (iv) 1955-56 | 67,34,000 |

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